



June 2024

Perceptions of Resource Governance and Development Impacts in Papua New Guinea

Australia Papua New Guinea
Economic Partnership
Sustainable Governance of
Natural Resource Wealth Pillar

Baseline Initiative



New Ireland Province - Lihir - Driving to Lihir gold mine.



Square Circle is a global development consulting company headquartered in Brisbane, Australia. We work critically, adaptively and creatively with development partners to facilitate a more inclusive development process that enables sustainable and equitable impact. To do this, we partner with communities, governments, civil society, the private sector and development partners to connect policy and capacity to better serve diverse communities. A key part of our approach is how to best work with cultures, politics, environments and institutional norms to enable knowledge and skills to take us into a more sustainable, inclusive future.

About this report

This report showcases the findings of the **Baseline Assessment of Resource Governance and Development Impacts** (“the Baseline”) conducted for the **Australia Papua New Guinea Economic Partnership** (APEP).

Implemented through **APEP’s Sustainable Governance of Natural Wealth Pillar**, the purpose of the assessment was to understand how landowners and communities experience resource governance and development impacts in four of Papua New Guinea’s (PNG) extractives provinces: **Morobe, New Ireland, Gulf and Western Province**.

The Baseline was carried out as a partnership between **Abt Global, Square Circle Global Development** and **Tanorama Limited**.

This report was written by **Square Circle**. The authors would like to thank the resource owners, community members and stakeholders who made this report possible by sharing their perspectives and stories on resource governance and development impacts in PNG.

The Australia PNG Economic Partnership

APEP is a multi-sectoral partnership between the governments of **Australia and PNG** to help PNG create a resilient and diversified economy. Managed by **Abt Global**, APEP is guided by the bilateral priorities outlined in the 2020 PNG Australia Comprehensive Strategic and Economic Partnership (CSEP). The partnership is being carried out through five strategic pillars, including **Pillar 4b: Sustainable Governance of Natural Resource Wealth**.

Pillar 4b: Sustainable Governance of Natural Resource Wealth

APEP’s **Sustainable Governance of Natural Resource Wealth Pillar** supports multi-stakeholder partnerships to strengthen resource governance, sustainable and inclusive development outcomes, and the investment climate in PNG’s resource sector.

A series of short documentaries has been produced to accompany this report. The videos can be accessed from this link:



Table of Contents

About this report	1
Executive Summary	2
Background	13
Findings	37
Pathways Forward	90
Annex A: Baseline Summary Data	104

List of Acronyms

Artisanal and Small Scale Mining	ASM
Australia Papua New Guinea Economic Partnership	APEP
Australia Comprehensive Strategic and Economic Partnership	CSEP
Baseline Assessment of Resource Governance and Development Impacts	The Baseline
Business Against Corruption Alliance	BACA
Chamber of Resources and Energy	CORE
Civil Society Organisation	CSO
Consultative Implementation and Monitoring Council	CIMC
Department of Petroleum and Energy	DPE
Environmental and Social Governance	ESG
Gender equality, disability and social inclusion	GEDSI
Gross Domestic Product	GDP
Gross National Income	GNI
Gross Value Added	GVA
The Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development	IGF
Institute of National Affairs	INA
International Council on Mining and Metals	ICMM
International Petroleum Industry Environmental Conservation Association	IPIECA
Joint Organisational Capacity Assessment Tool	JOCAT
Kumul Minerals Holdings Limited	KMHL
Kumul Petroleum Holdings Limited	KPHL
Landowner Association	LOA
Liquid Natural Gas	LNG
Memorandum of Agreement	MOA
Micro, Small and Medium Enterprise	SMSE
Mineral Resources Authority	MRA
Mineral Resources Development Company	MRDC
Multi-Stakeholder Group	MSG
Occupational Health and Safety	OHS
Papua New Guinea	PNG
Persons With Disability	PWD
PNG Conservation and Environment Protection Authority	CEPA
PNG Extractive Industries Transparency Initiative	PNGEITI
PNG Resource Governance Coalition	PNGRGC
Provincial Coordinating and Monitoring Committee	PCMC
Resource Governance Instrument	RGI
Special Mining Lease	SML
Technical Working Group	TWG
Umbrella Benefits Agreement	UBA
Water, Hygiene and Sanitation	WASH

Executive Summary

Background

Papua New Guinea’s development trajectory has been inextricably shaped by its experience with the extractive sector. Its people, its landscapes, and its economy, have all been impacted – sometimes transformed – by the extraction of mineral, oil and gas resources.

Like many other resource-rich developing nations, converting resource wealth into inclusive and sustainable development outcomes has been a central development challenge in PNG’s nation building efforts. Successive national development plans have sought to balance extractives-driven economic growth with the equitable and sustainable management of natural resources. Significant steps have also been taken towards strengthening resource governance across the sector from government, industry and civil society.

Yet the question of *why PNG has struggled to transition its natural resource wealth into broad-based, sustainable forms of development* remains at the centre of public debate—from the village, to the boardroom, to the National Parliament. This question is perhaps

loudest at the local level, where extraction takes place. Major resource projects in PNG have resulted in mixed legacies, with environmental, economic and social impacts that have transformed local communities and ecosystems.

The Baseline

To contribute to the ongoing efforts to strengthen resource governance in PNG, the Baseline Assessment of Resource Governance and Development Impacts (“the Baseline”) was conducted as part of a wider series of initiatives planned through APEP’s Sustainable Governance of Natural Resource Wealth Pillar.

The overall aim of the Baseline was to understand the experience of resource governance and development impacts in PNG’s extractive provinces, including the priorities of local stakeholders for resource sector governance. The Baseline utilised four instruments that were administered in four of PNG’s extractives provinces:

Morobe, New Ireland, Gulf and Western Province. These four instruments were: the Resource Governance Instrument (RGI), the local capacity assessment, the disability assessment and digital storytelling.

For the extractive sector, the empirical data collected through the Baseline can support policy and practice reforms that lead to more sustainable and inclusive development impacts. The data also allows the sector to compare the “current state” with “future states” to determine the impacts of upcoming projects, initiatives and policies.



Gulf Province - Miaru Village.

For APEP, the Baseline contributes to building relationships and networks with sector stakeholders, informing the design of upcoming APEP initiatives and establishing indicators for ongoing monitoring, evaluation and learning. This is particularly important given APEP is a new development partnership supporting governance in PNG's extractives sector.

The focus on governance for the Baseline explores how landowners, impacted communities and citizens at the subnational and local level experience the key governance concepts of **transparency, accountability and participation**, as well

as the **effectiveness of agreements and relationships between stakeholders** in the sector.

As part of the subnational and local focus, the Baseline also investigated select **cultural concepts used across PNG** that play an active role in consultation, participation, decision making and in how development impacts stemming from resource extraction are perceived. The cultural concepts are *wok bung, wok kastom, hanmak, pasin, luksave, wan bel, bihain taim* and *tok save*. These are defined on Page 77.



Morobe Province - Kaisenik Village - APEP's GEDSI and Safeguarding Unit Manager conducting Baseline survey with community members.

Key Findings

The net impacts of extractive projects are experienced negatively.

Across Morobe, New Ireland, Gulf and Western Provinces, people were asked to rate the impact of mining, oil and gas projects on them, their community, and PNG. **Overall, the net impact of mining, oil and gas projects in PNG was perceived as negative.** The areas that were most negatively impacted were **the local economy and infrastructure.**

The impacts were experienced differently by landowners, men, women, persons with disability (PWD), and other groups, though no group was positive about the impact of mining, oil and gas. People impacted by projects were more positive about mining, oil and gas because they were close enough to see initiatives and projects at the local level, though people reported that mining, oil and gas projects had not delivered the services and outcomes that they were hoping for.

People are supportive of the extractive sector

Despite the impacts of resource projects being perceived as negative, **people are still supportive of the extractive sector.**

Landowners, communities and local stakeholders reported that extractive projects had not yet delivered the development outcomes that people in

"Since mining began in PNG, why are we still drinking from the river?"

Female,
Gulf Province

"I support mining, oil and gas projects to establish health facilities, schools and roads in the province and village"

Male,
Gulf Province



New Ireland Province - Kavieng Village - Children lining up at Omo Primary School.

PNG have hoped for, though with improved governance, people are optimistic about the development impacts and outcomes that the sector can potentially deliver.

Subnational resource governance is generally experienced negatively

Resource governance was measured across five key areas that are important for subnational resource governance in PNG: accountability, participation, transparency, relationships and agreements. It was found that there is room for improvement in every area of resource governance.

Accountability was rated the highest among the areas of governance, where relationships between stakeholders and the community was rated the lowest.

Importantly, it was found that strong

resource governance improves perceptions of impacts and support for the sector. When projects are governed well, the experience of their impacts in the community is more positive.

Cultural governance improves how communities experience extractive projects

Cultural governance was rated significantly more negatively than resource governance. This may reflect the centrality of culture in PNG, the importance of these cultural precepts to communities, and that these concepts do not come from 'outside'. It also signals that there is room for improvement in how sector stakeholders operate in a way that is respectful of local culture.

Like resource governance, perceptions of cultural governance were also positively linked to perceptions of development impacts and support for the sector. In

fact, while resource governance influences how communities experience mining, oil and gas, cultural governance does the same with almost twice the strength.

Women and PWD have less opportunity to participate in resource governance.

In the locations surveyed, women reported that they had less opportunity to participate in discussions around mining, oil and gas than men did. The same was true of PWD when compared to the rest of the population. **Both women and PWD also reported that when they did participate, they were not listened to as much as other groups were.**

Climate Change

More than half of the participants had experienced a loss of income and/or stress resulting from extreme weather events, highlighting the risks associated with climate change and the importance of managing climate change risks in resource governance.

Civil society and landowner capacity for resource governance requires strengthening

The capacity of civil society and landowner organisations to partake in resource governance is varied across different organisations. In general, there is a need to support capacity in the areas of identity and purpose, governance, management and administration, financial management, services, programs and projects, networks and partnerships and communications and

“Those often unheard [marginalised groups] have to be brought into the project with capacity building and training, especially disabled people”

Female,
Gulf Province

information management.

A key challenge was experienced across organisations was insufficient funding and resourcing, which impacted on organisational capacity to effectively deliver on their resource governance roles and mandates.

Pathways Forward

The relational nature of resource extraction in PNG connects land, landowners, communities and their public representatives in the resource development and governance process. Supporting a multi-stakeholder approach to subnational resource governance is critical to ensuring more sustainable and inclusive development outcomes for landowners and local communities.

While mechanisms for multi-stakeholder extractive governance exist to varying degrees of effectiveness across PNG, the findings of the Baseline point to key opportunities to strengthen resource governance at the subnational and local levels in the areas of capacity development and institutional strengthening, data and reporting, agreement-making and social inclusion efforts. These opportunities represent potential pathways forward for APEP and have been identified to support multi-stakeholder governance efforts in PNG. It is also hoped that the findings and recommendations from the Baseline will support broader sector efforts to strengthen policy and practice for subnational resource governance.

1. Support subnational capacity for resource governance

Key opportunities exist to support landowner associations, civil society organisations, community development foundations and provincial and local-level governments to effectively deliver on their resource governance roles and mandates. The following capacity development and institutional strengthening opportunities could be taken up by APEP, potentially in partnership with industry, development partners and government:

- A.** Multi-stakeholder Resource Governance Training and Capacity Development
- B.** Institutional Strengthening for Landowner Associations and Civil Society Organisations

- C.** Support stakeholders to investigate the merits of a Landowner Association Capacity and/or Compliance Body
- D.** Consider embedded support for provincial and local-level governments

2. Partner with the PNGEITI to strengthen subnational data and reporting

In 2019 the PNGEITI MSG endorsed a plan for the subnational implementation of the PNGEITI. At the time, there was strong support for PNGEITI subnational implementation from all stakeholders—including both national and subnational levels of government, as well as extractive companies, landowner associations and

businesses, and CSOs. Stakeholders saw PNGEITI subnational reporting as an opportunity to improve transparency, accountability and development outcomes at the local level.

In 2024 the findings of the Baseline further support the need for more accessible information on subnational and project level payments, transfers and expenditure—and other data relevant to communities living in extractive provinces. PNGEITI has the potential to play an important role in improving transparency, accountability and participation for subnational resource governance, especially for communities who feel resource revenues are not resulting in service delivery and community development. Strengthening subnational data and reporting contributes to greater transparency, participation and



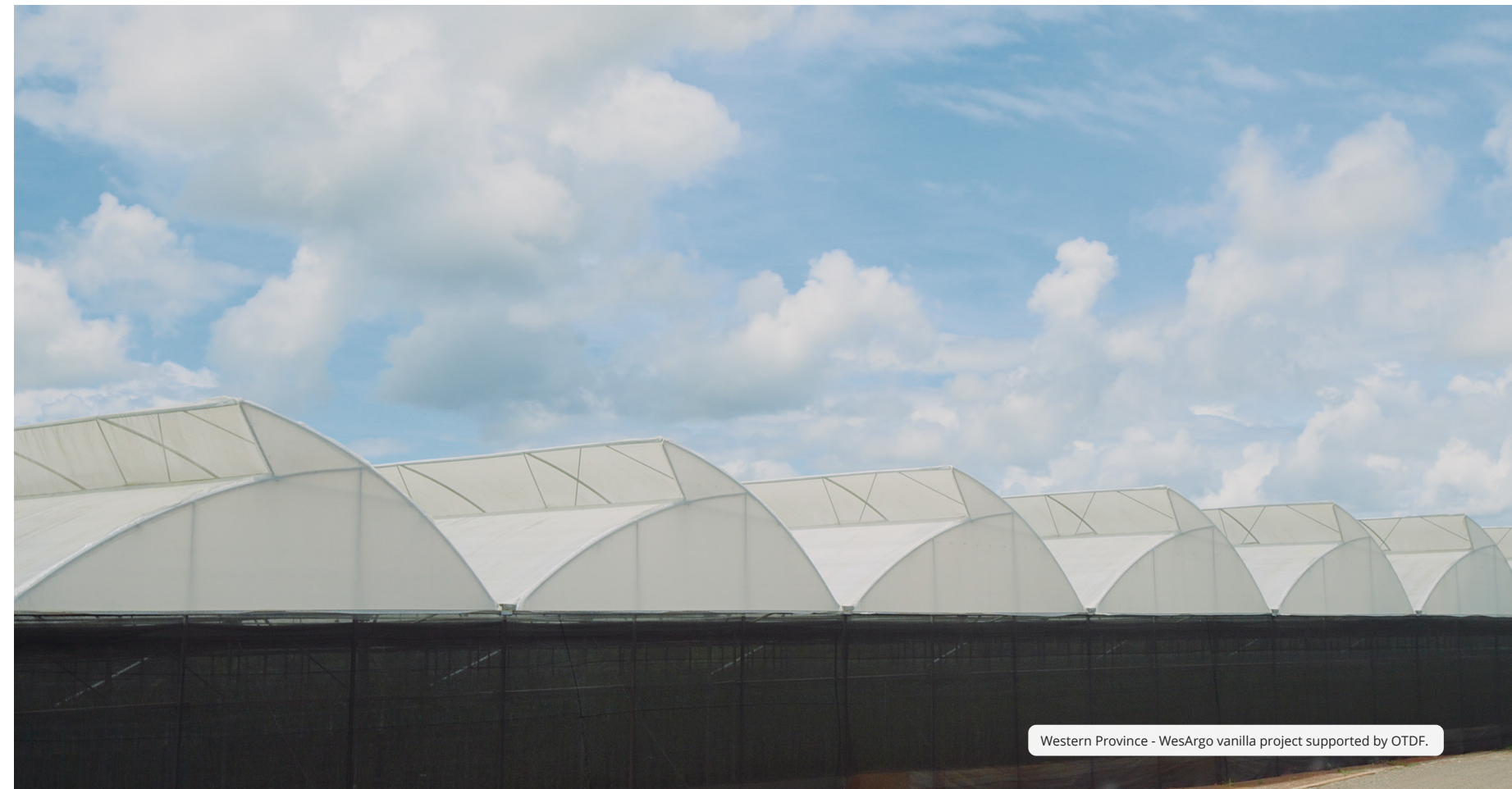
accountability over financial flows and impacts. Improved data and reporting also supports evidence-based decision-making, informs policy and practice, and contributes to making good governance ‘normative’ for all stakeholders involved in extractive projects. Subnational implementation would also help PNGEITI in the implementation of the EITI Standard 2023.

3. Partner with the PNGRGC to support its operationalisation

The PNG Resource Governance Coalition was formed as the umbrella civil society organisation for PNG’s extractive sector. PNGRGC has the dual purpose of coordinating civil society’s participation in PNGEITI while playing a broader role as an umbrella organisation for CSOs with an interest in extractives. Through its Roadmap 2021-23 endorsed by its Council, PNGRGC outlines a series of strategic priorities and operationalisation needs, including its strengthening management and administrative functions. Other priorities relevant to subnational governance include conducting a membership drive in extractive provinces and supporting the subnational implementation of the PNGEITI. In recent times, PNGRGC has not had access to an administrative grant or other forms of funding to support key projects. The ‘re-operationalisation’ of PNGRGC would support civil society in their dialogues with government and industry, strengthen civil society’s participation in the governance of the extractive sector including the PNGEITI, and create membership networks at the subnational level to share data and learnings to support local stakeholders.

4. Scope a PNG Resource Governance Hub

The Baseline findings have indicated a need to improve resource governance at all levels, including access to knowledge and data. A PNG Resource Governance Hub could provide a knowledge repository of materials that support good governance in the inclusive and sustainable development of PNG’s extractive resources. The library could be a ‘one-stop-shop’ for policies, legislation, standards, good practice guides, industry white papers, academic articles and research theses. It could also store key project-related documents such as sustainability reports



and publicly disclosed agreements. The proposed Hub could also include other features, depending on where it sits – either owned by a PNG institution from government, industry, civil society or academia, or perhaps coming under a multi-stakeholder initiative such as the PNGEITI. If the Hub did support PNGEITI’s digitisation efforts, it could potentially connect to current efforts to digitise the reporting of real-time data.

5. Partner with the sector to learn from past agreements and agreement-making processes

The findings of the Baseline point to both a dissatisfaction with current project agreements as well as a lack of information and understanding about the commitments they contain. People in resource provinces across PNG perceive agreements to be not governed well, to cause disputes, and to not be fair. There is therefore much value in better understanding the lessons that can be learnt from existing resource project agreements in terms of what types of obligations, mechanisms and vehicles support sustainable and inclusive development impacts in the geographical footprint of resource projects and for PNG more broadly. With

the ongoing nature of agreement reviews in PNG's resources sector, focusing on improving agreements has the potential to bring about policy and practice reforms for both greenfield and brownfield resource projects.

6. Broker development partnerships in extractive provinces

With its focus on inclusive and sustainable economic livelihoods, APEP could broker partnerships with community development foundations, subnational governments and extractive companies to support existing efforts for 'collective impact' in select target projects. Potential partnerships could attempt to connect both 'supply side' and 'demand side' opportunities. For instance, what development partnership opportunities exist on the demand side in resource provinces (i.e., existing ventures or plans that are already in place and would benefit from a partnership with APEP)? What development partnership opportunities exist on the supply side across the APEP pillars (i.e., existing APEP initiatives or priorities that could benefit stakeholders in extractive provinces)?

7. Support gender equality, disability and social inclusion in extractive provinces

As the findings of the Baseline have indicated, different groups experience resource governance and development impacts differently. Key considerations and priorities for more inclusive multi-stakeholder participation in resource governance are:

- Stakeholders should ensure often marginalised groups like women,

persons with disabilities and youth participate effectively in decision-making for resource governance.

- Key project documents such as environmental and social impact assessments, project agreements and impact reporting should be made available and accessible to all stakeholders.
- Local level engagement should include the views of women, persons with disabilities, youth and other groups that are sometimes excluded from decision-making. Engagement can be enhanced by ensuring meeting places are in accessible locations and any special provisions to ensure accessibility are reasonably met; that meetings are set at times that make it possible for women and PWD to attend; and that they are held in a way that encourages active participation by all involved so that all opinions are valued.
- Infrastructure built from extractive-derived funds should be accessible and inclusive.
- Organisational capacity for local CSOs in social inclusion should be supported, including training on GEDSI and organisational practices that encourage participation of women, PWD and other groups who may be excluded from resource governance. This can include developing fit-for-purpose GEDSI plans, setting GEDSI targets, and monitoring, evaluation and learning around GEDSI.

Background

Morobe Province - Winima Village - Field team member conducting a disability assessment with a community member.

PNG's Development Encounter with Mineral, Oil and Gas Resources

The large-scale extraction of minerals and hydrocarbons has long-featured in the development aspirations of both ‘developed’ and ‘developing’ nations. This is certainly the case in Papua New Guinea, where the extraction of mineral, oil and gas resources has played a central role in successive national development strategies.¹

While mining was a prominent part of PNG's economy in the pre-independence period², mineral extraction became the principal source of government revenue post-independence with the development of the Bougainville Copper and Ok Tedi gold and copper resources, and later the Porgera and Lihir Gold Mines³. Since 2015, liquid natural gas (LNG) production has also come to prominence through the PNG LNG Project and the prospective Papua LNG Project.

PNG's present-day extractive sector exploits substantial oil, gas and mineral reserves, including gold and copper, and to a lesser extent condensate, nickel and cobalt⁴. Collectively, these extractive resources make a significant and growing contribution to PNG's national economy through government revenues, exports, employment, and social expenditures.⁵ Oil, gas and minerals accounted for 26% of PNG's nominal GDP and 86% of total exports in 2020.⁶

1 See PNG Development Agenda and Extractive Sector Key Events Timeline on page 20, which charts the PNG Development Agenda and Extractive Sector key events over time.

2 The indigenous peoples of New Guinea have mined and traded stone implements and ochre for thousands of years. Williamson, A., & Hancock, G. (2005). *The Geology and Mineral Potential of Papua New Guinea* (1st ed.). Papua New Guinea Department of Mining.

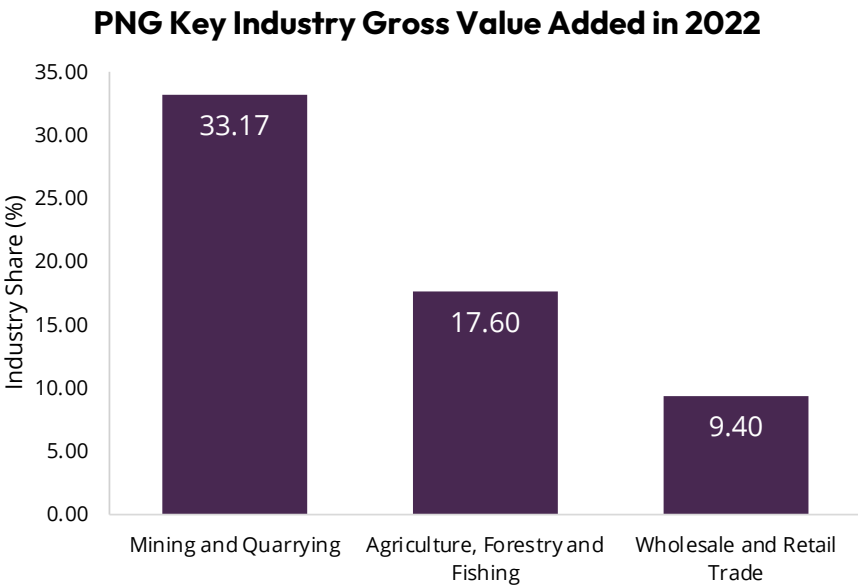
3 Banks, G. (2021). *Resource security in Papua New Guinea: Linking resources, development and security*. Development Bulletin, pp. 61-64.

4 Papua New Guinea Extractive Industries Transparency Initiative. (2020). PNG EITI 2020 Report, pp. 50. Accessed 28 May 2024. <https://www.treasury.gov.pg/wp-content/uploads/2023/05/2020-PNG-EITI-REPORT.pdf>.

5 GDP contribution between the 2016 to 2020 periods ranged between 24% to 28%. Papua New Guinea Extractive Industries Transparency Initiative, 2020, pp. 54.

6 Papua New Guinea Extractive Industries Transparency Initiative, 2020, pp. 49.

The extractives sector also contributed 33.2% of gross value added (GVA)⁷ in 2022⁸, almost double the agriculture, forestry and fishing sectors combined.



Source: National Statistics Office of Papua New Guinea (2022).

Shifting Natural Resource Policy in PNG

In 2020 the extractives sector accounted for approximately one quarter of PNG's GDP, yet it contributed only one per cent of GDP to government.⁹

Successive governments have adopted policy settings designed to capture a larger share of the ‘resource rents’ generated from natural resource extraction. One structural addition to the sector was the establishment of the state-owned enterprises Kumul Petroleum Holdings Limited (KPHL) and Kumul Minerals Holdings Limited (KMHL) in 2015 and 2016 respectively.¹⁰ Through these state-owned enterprises, the PNG government has sought to increase state equity in extractive projects. An example of this is the negotiation of ownership of Porgera being held in a new joint venture owned 51% by PNG stakeholders and 49% by Barrick Niugini Limited with the PNG government retaining the right to acquire the remaining 49 per cent of Porgera Mine at fair market value after 10 years.¹¹

7 Gross value added is a metric of productivity that measures the contribution of the value of goods and services to the economy.

8 National Statistical Office of Papua New Guinea. (2022). *PNG National Accounts 2006-2022*, accessed 28 May 2024, <https://www.nso.gov.pg/statistics/economy/gross-domestic-products/gross-domestic-products-2016-2022/>.

9 Laveil, M., 2022, *Papua New Guinea: lessons of the last decade in four charts*, The Interpreter: Lowy Institute, accessed 28 May 2024, <https://www.lowyinstitute.org/the-interpreter/papua-new-guinea-lessons-last-decade-four-charts>.

10 KPHL was established under the Kumul Petroleum Holdings Limited Authorisation Act 2015 and KMHL was established under the Kumul Minerals Holdings Limited Authorisation Act 2015.

11 Barrick Gold Corporation. (2021, April 9). Porgera Mine Set to Restart as PNG and Barrick Niugini Limited Agree New Partnership. *Barrick Gold Corporation*.

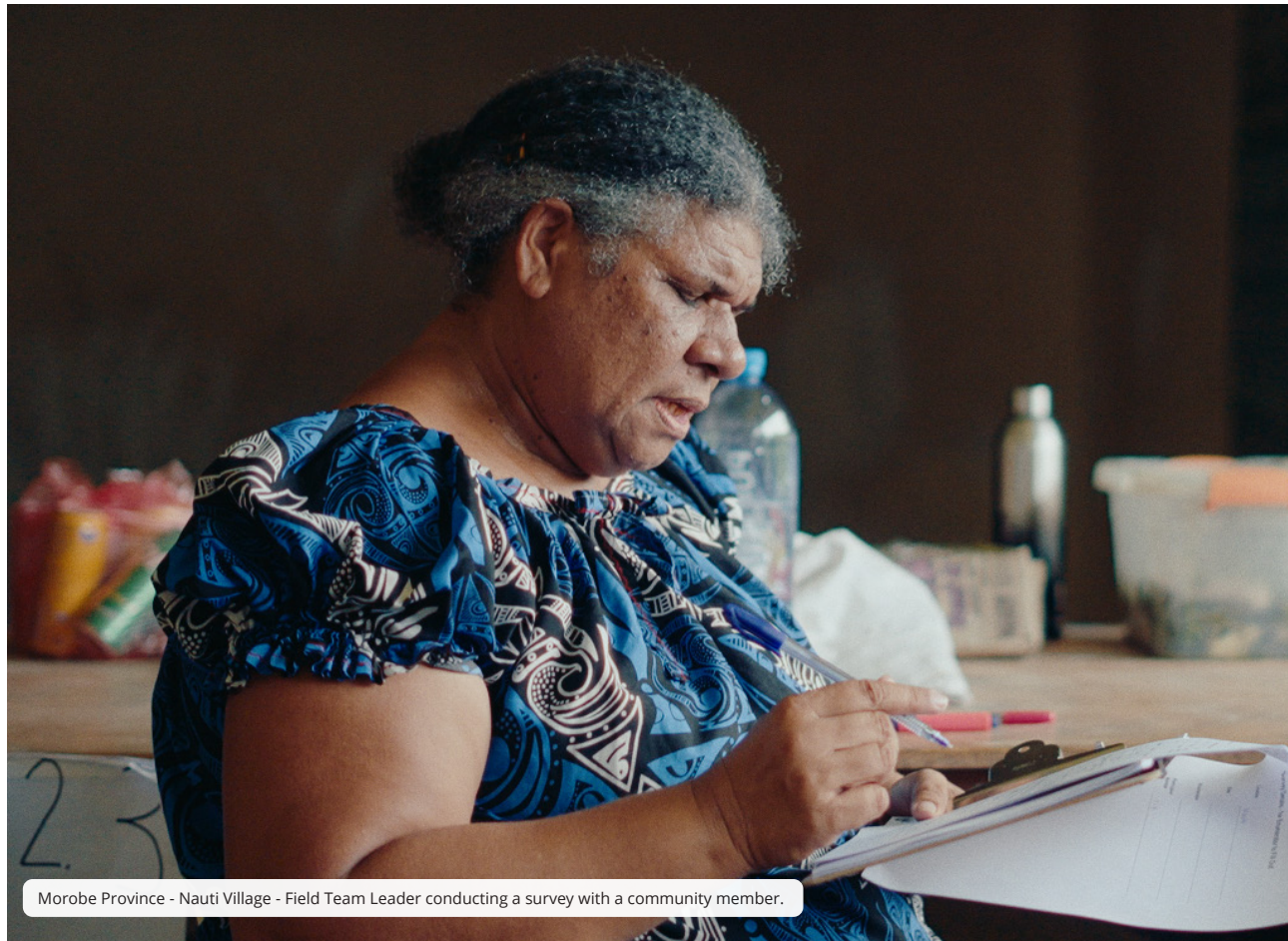
Direct fiscal revenues through taxes, royalties, levies and fees help the government to fund basic services to its citizenry—many of whom live in remote areas with limited access to health, education, electricity and sanitation services. At a local level, employment and supply chain opportunities help to stimulate local economies around PNG’s mining, oil and gas projects. Social investment programs including those delivered through community development foundations and investment vehicles also provide livelihood opportunities and income streams to landowners and impacted communities.

However, like many other resource-rich developing nations, converting resource wealth into inclusive and sustainable development outcomes has been a central development challenge in PNG’s nation building efforts. Across key indicators such as gross national income (GNI) per capita, life expectancy at birth, school enrolment rates, and access to water, sanitation and electricity, PNG falls behind other lower-middle income and Asia Pacific countries.¹²

"I support mining, oil and gas projects for the services and opportunities they can bring but only if they are implemented correctly."

Female,
Gulf Province

12 PNG is a lower-to-middle-income country with a GDP per capita of US\$3,115.9 in 2022. World Bank Group. (2024). GDP per capita (current US\$) – Papua New Guinea, accessed May 2024: <https://data.worldbank.org/country/papua-new-guinea>.



Morobe Province - Nauti Village - Field Team Leader conducting a survey with a community member.

The question of *why PNG has struggled to transition its mineral wealth into broad-based, sustainable forms of development* has been at the centre of public debate—from the village, to the boardroom, to the National Parliament. One challenge stemming from an extractive-centric economy is the ‘resource curse’, where countries with an abundance of natural resources seemingly experience worse development outcomes and produce less-effective systems of governance than countries with more diversified economies.¹³

Whether the extractives sector in PNG has brought with it some of the development challenges associated with the resource curse is up for debate. What is clear, however, is that PNG has become increasingly resource-dependent over time (see Figure 2).

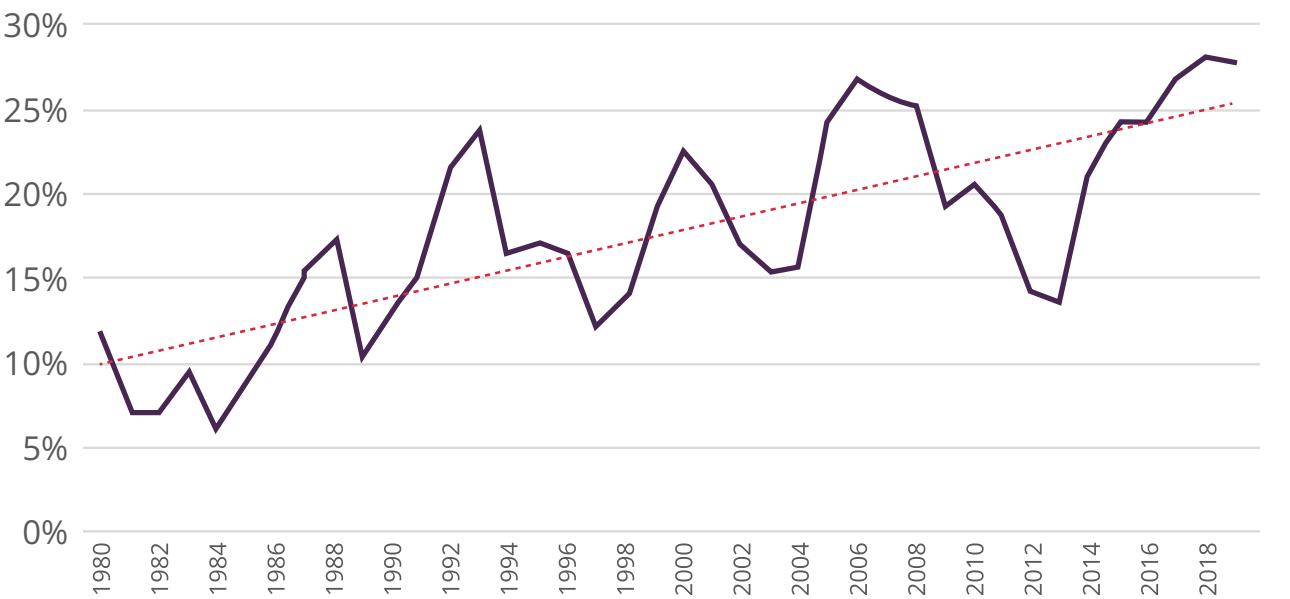


Figure 2: Resource Dependency 1980-2019.

Note: This graph shows the percentage share of resources in total GDP in current prices, trendline added. Howes, S & Pillai. LN 2022. *Papua New Guinea: Government, Economy and Society.*, ANU Press, Canberra.

13 Although the concept of the ‘resource curse’ is contested, there is a wealth of literature that documents the challenges of extractives-led growth including the potential for reduced government capacity, poor governance, rising corruption, increased conflict, inequality and poverty. In PNG, the quantum and potential consequences of resource-dependent economy have been noted by many commentators, including. For instance, Howes, S., Fox, Rohan., Laveil, M., McKenzie, L., Prabhakar Gudapati, A., and Sum, D. (2020). *PNG’s economic trajectory: The long view*. In Papua New Guinea: Government, Economy and Society. Howes and Pillai. ANU Press. Also see Kraal, D., & Odhunohttps, F. (2020). *Papua New Guinea’s Extractive Resource Sector: Towards a Policy of Leaner Tax Incentives*. Discussion Paper, National Research Institute. Source www.pngnri.org/images/Publications/DP172_Papua_New_Guineas_extractive_resource_sector.pdf. Burton, J. (1998). ‘Mining and Maladministration in Papua New Guinea.’ in P. Lamour (ed.), *Governance and Reform in the South Pacific*, Canberra: The Australian National University, National Centre for Development Studies, (Pacific Policy Paper 23). Grice, T. (2019). Subnational payments in Papua New Guinea’s extractive sector: *Scoping study for PNG Extractive Industries Transparency Initiative*, [http:// www.pngeiti.org.pg](http://www.pngeiti.org.pg). and Howes, S and Leng, A. (2023). ‘PNG as Resource Dependent as Saudi Arabia’. DevPolicy Blog, Development Policy. <https://devpolicy.org/png-as-resource-dependent-as-saudi-arabia-20231216/>.

Another challenge has been the transformative nature of mining and oil and gas projects at the local level, *where extraction takes place*. Major resource projects in PNG have resulted in mixed legacies, with environmental, economic and social impacts that have transformed landscapes, communities, and the nation.¹⁴ These seminal experiences of resource extraction have strengthened Papua New Guinean's desire to participate in and benefit from a resource sector that is governed in an environmentally and socially responsible way.

Australia's evolving relationship with PNG

Australia is PNG's largest development and economic partner. Supporting a stable and prosperous PNG is a key foreign policy objective of Australia, founded on mutual interests in economic and security partnership. Australia invests around \$550 million a year in assistance in PNG. This development assistance is designed to support PNG to meet its own development objectives and the global Sustainable Development Goals including in economic growth, education, health, law and justice, infrastructure, climate change, gender, and subnational priorities.

Australia's relationship with PNG's extractive sector has evolved over time. As PNG's administrator in the colonial period, Australia played a direct role in the surveying and development of PNG's mining, oil and gas resources. In the years following independence in 1975, Australian mining companies were key players in the exploration and development of major mineral deposits including Panguna, Ok Tedi and Lihir. In more recent times, Australian mining operators have focused on smaller assets, including St Barbara's Simberi mine and Niuminco's Eddie Creek, as well as the PNG LNG¹⁵ and Papua LNG¹⁶ oil and gas projects. Through the Australia PNG Economic Partnership (APEP), Australia is also supporting PNG's governance efforts in mining, oil and gas to bring about more sustainable and inclusive development outcomes for the citizens of PNG.

¹⁴ The social disruption and environmental degradation from the Bougainville and Ok Tedi mines serve as permanent reminders of the importance of strong governance, environmental stewardship and benefits sharing for PNG's extractive projects.

¹⁵ Co-venturers of PNG LNG are Kumul Petroleum Holdings Limited, Santos Limited JX Nippon Oil & Gas Exploration Corporation and Mineral Resource Development Company Limited.

¹⁶ Co-venturers of Papua LNG are ExxonMobil, Santos, JX Nippon Oil and Gas Exploration, Kumul Petroleum Holdings Limited, Mineral Resources Development Company Limited.



Figure 3:
**PNG Development
and Extractive
Sector Timeline**

PNG Development Agenda

Extractive Sector Key Events

**Pre- 1975 Australian
Colonial Administration**

The colonial administration of Australia focused on the exploration and initial development of PNG's natural resources, which led to the discovery of major oil, gas, copper and gold deposits. The Petroleum Act 1937 was passed by the colonial administration to regulate the industry and control PNG's natural resources.

**Structural Adjustment
Period (1986 - 1995)**

There was a shift to acknowledging the role of the state in managing the minerals sector through state-owned enterprises and equitable benefits sharing. The Government faced international pressure to liberalise the minerals sector, resulting in the passing of new Mining, Oil & Gas Acts to incentivise private investment.

Mining Act 1992

Mining Act passed in 1992 which included revisions to processes for the distribution of royalties to landowners.

**Medium Term
Development Plan (2011
- 2015) and Medium
Development Plan II
(2016- 2017)**

The minerals sector is a key economic pillar across both Medium Term Development Plans. The plans identify the need for strengthened regulatory frameworks, increased local participation, and equitable distribution of resource benefits.

**Papua New Guinea
Development Strategic
Plan 2010-2030**

The Plan proposes rapid economic growth based on policy options: trade liberalisation, land reform and the redistribution of resource benefits through new economic corridors. The strategy will be implemented through four Medium Term Development Plans.

Vision 2050

Vision 2050 was developed in 2007 to set targets for PNG to become a global leader as a minerals producer and exporter. Ongoing medium-term development plans increasingly focussed on enhancing transparency, community participation and environmental protection.

**Medium Term Development
Plan III (2018 - 2022) and
Medium Development Plan
IV (2023- 2027)**

Building on the lessons from the first and second plans, the third and fourth Medium Term Development Plans focus on key investments to further stimulate inclusive and sustainable economic growth. There is a focus in the fourth plan on national prosperity and extensive policy, legislative and institutional reform to dramatically improve quality of life for Papua New Guineans. Mining, oil and gas revenues are projected to play a key role in PNG's projected economic growth.

**Australia - Papua New
Guinea Economic
Partnership (APEP)**

APEP Pillar 4b: Sustainable Governance of Natural Resource Wealth was established in 2022 to support the Government of PNG's efforts to strengthen resource governance for sustainable and inclusive development.

**Oil exploration
by colonial
administration
commences -
1911**

**Oil exploration
by private
companies
commences -
1923**

**Survey of mineral
deposits and
mining industry of
PNG finds
deposits including
gold, silver,
copper, copper
matte, copper ore,
osmiridium and
platinum - 1954**

PNG Independence

Formal independence achieved in 1975.

**Immediate
Post-Independence
(1975-1985)**

PNG's constitution vested the Independent State of PNG with ownership of all natural resources. The newly created national government was granted the power to regulate the exploration, extraction and sale of natural resources. There was a focus on harnessing natural resource wealth to drive national growth.

**Porgera
commences
operations -
1990**

**Bougainville
Civil War -
1988 - 1998**

**Panguna
closes due to
the Bougain-
ville conflict -
1988**

**Panguna
commences
operations -
1972**

**Kumul Minerals
Holdings commences
operations as PNG's
national mining
company - 2016**

**Kumul Petroleum
Holdings established
as PNG's national
petroleum company -
2015**

**PNG Resource
Governance Coalition
(PNGRGC) - 2015**

**PNG Extractive
Industries
Transparency
Initiative (EITI)
National Secretariat
established - 2015**

**PNG LNG
commences
operations - 2014**

**Ramu Nickle Mine
commences
operations - 2012**

**Hidden Valley
commences
operations - 2009**

**Simberi commences
operations - 2008**

**Lihir mine
operations
commence -
1997**

**Disengagement of
BHP from Ok Tedi and
transfer of BHP's
equity stake to PNG
Sustainable Develop-
ment Program - 2002**

**Legacy Impact
Assessment covering
environmental,
social and human
rights impacts
caused by Panguna
mine - 2022 - 2024**

**Negotiations and
reviews for MOAs
and Compensation
Agreements for
Lihir, Porgera, Wafi
Golpu, Simberi, Ok
Tedi and Papua
LNG.- 2018 - 2024**

**Papua LNG production
expected to commence
2027-28**

Key PNG development agenda and extractive sector key events are included in the timeline to provide an overview of the historical activities of the extractive sector. The activities detailed in the timeline are not intended to be exhaustive.

Resource Governance in PNG

PNG's development pathway has been inextricably linked to the extractives sector, with the extraction of minerals, oil and gas resources set to continue for the foreseeable future. Recognising this, national development plans have sought to balance extractives-driven economic growth with the equitable and sustainable management of natural resources.¹⁷

Although legislative reform has at times been a slow process, many gains have been made to strengthen the governance and regulation of the sector. For instance, the regulatory bodies for mining and oil and gas, the Mineral Resource Authority (MRA) and the Department of Petroleum and Energy (DPE), have undertaken a range of initiatives to strengthen benefits sharing arrangements; development coordination during exploration, production and closure; geological survey and tenement administration; occupational health and safety (OHS) through inspectorate branches; environmental monitoring and compliance; and the regulation of the artisanal and small scale mining (ASM) sector. PNG's Infrastructure Tax Credit Scheme, an innovative program where extractive companies receive tax credits for the implementation of infrastructure projects, has also helped to deliver key health, education and transport infrastructure in remote parts of the country.¹⁸

At the same time, extractive companies have also strengthened their environmental, social and governance (ESG) regimes in line with global efforts to improve the footprint of the industry.

A greater focus on environment stewardship has included improved practices in biodiversity, water, energy, tailings, waste and rehabilitation management. Social performance has been strengthened in key areas such as local content, programs against gender-based violence, community development and livelihood programs, and social investments that benefit landowners and impacted communities.

¹⁷ Vision 2050 recognises the importance of higher standards of transparency, accountability and good governance. PNG's mineral wealth agenda has shifted over time – for more information see the timeline on page 20.

¹⁸ See, for instance, the websites of the [Mineral Resource Authority](#) and the [Department of Petroleum & Energy](#).

The multi-stakeholder governance platform of the PNG Extractive Industries Transparency Initiative (PNGEITI) has also strengthened transparency in the reporting of financial flows and the impacts from the sector.¹⁹ PNG's participation in the EITI forms part of a broader partnership between government, the private sector and civil society promoting transparency, access to information and improved service delivery.²⁰ Through the activities of PNGEITI, PNG is seeking to improve public understanding of the management of the extractive industries, increase the accountability of both government and industry, and improve the attractiveness of PNG as a destination for foreign investment.

With the extractive sector seen by many local people as a vehicle to provide economic opportunities and services, landowners and impacted communities have also sought to place themselves in the driver's seat of their own development. These efforts include landowner business entities that have positioned themselves to participate in the supply chain opportunities associated with extractive projects, such as mining, construction, catering, accommodation and security services.²¹ Community development programs are also a common feature of compensation and benefits packages, often with participative planning processes where landowners and impacted communities nominate projects in areas such as agriculture, health, infrastructure, education and financial literacy.

Despite these efforts from stakeholders across the sector, a continued focus on the governance, regulation and management of mineral, oil and gas resources is required to ensure the equitable, fair, sustainable and inclusive development of PNG's natural resource wealth.

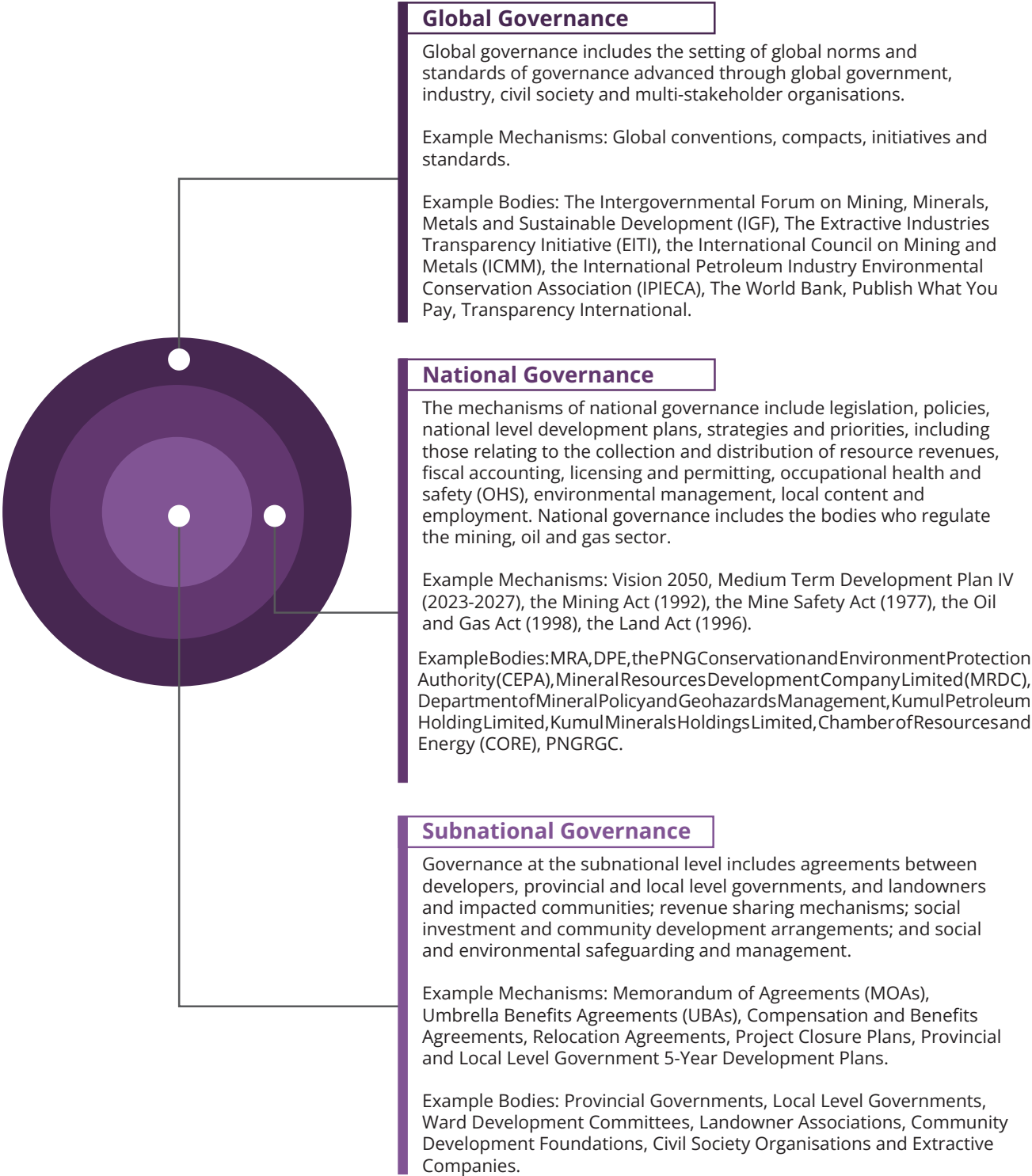
¹⁹ The EITI is a global standard that promotes transparency and accountability in the oil, gas and mining sectors. Following the establishment of an informal multi-stakeholder group in 2012, the PNG government announced its commitment to EITI in 2013. In 2013, NEC Decision No. 90/2013 approved for PNG to sign up to the EITI and endorsed the minister responsible for Treasury matters to lead its implementation. For EITI, the MSG agreed that the extractive industries include mining, oil and gas. Quarrying, forestry and fisheries have been excluded. Papua New Guinea Extractive Industries Transparency Initiative. (2019). PNG EITI 2018 Report. <https://pngeti.org.pg/wp-content/uploads/2022/03/2018-PNGEITI-Report.pdf>.

²⁰ Another example of this tripartite partnership is PNG's participation in the Open Government Partnership.

²¹ Jackson, R. (2015). [The Development and Current State of Landowner Businesses Associated with Resource Projects in Papua New Guinea](#). Publication for the Chamber of Mines and Petroleum.

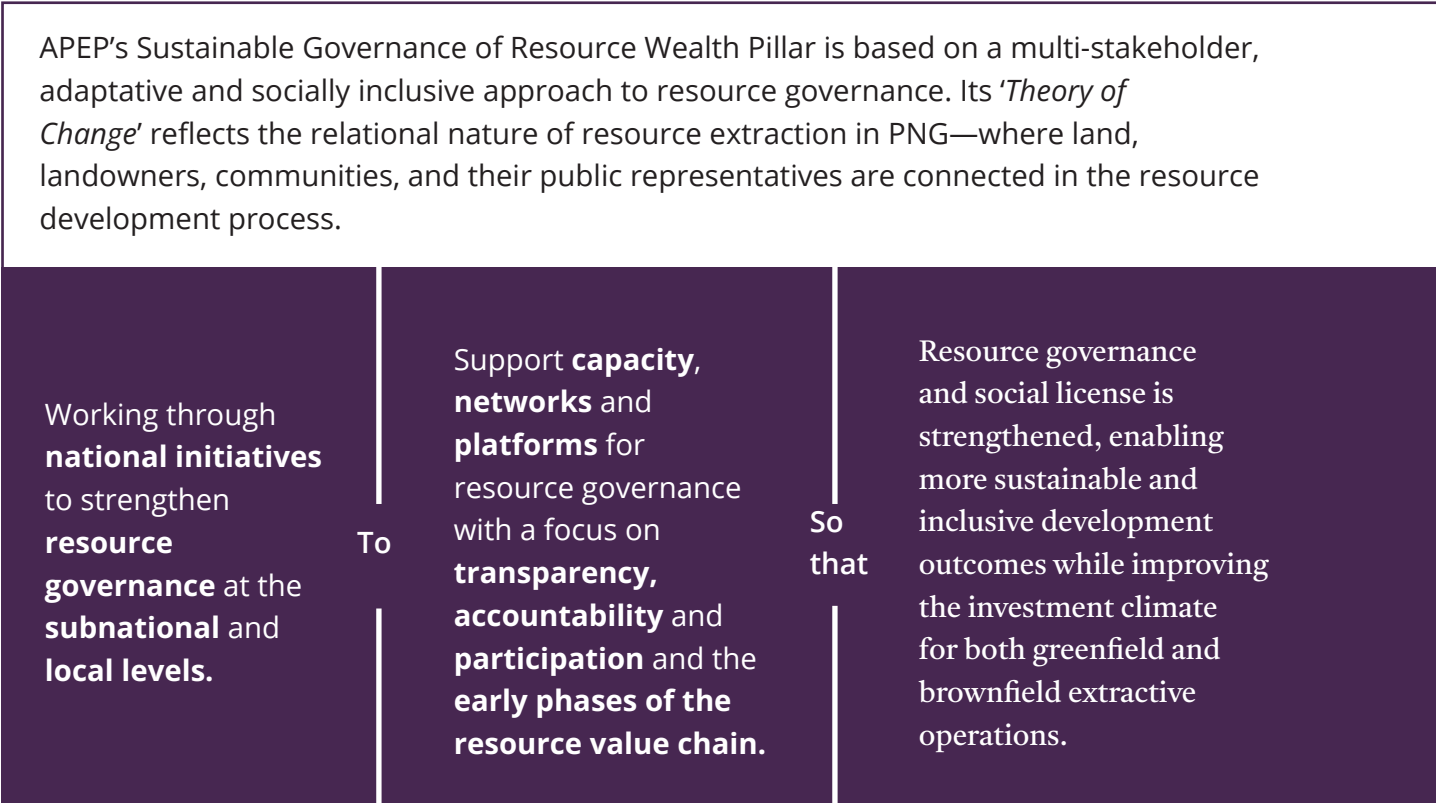
Resource governance spans global, national, subnational and local levels. While each of these levels of governance are intertwined, they generally focus on different actors and mechanisms.

Within this ecosystem of resource governance, the Baseline seeks to understand subnational and local experiences of resource governance and development impacts in PNG.



The Baseline

To contribute to the ongoing efforts to strengthen resource governance in PNG, the Baseline Assessment of Resource Governance and Development Impacts (“the Baseline”) is part of a wider series of initiatives planned through APEP’s Sustainable Governance of Natural Resource Wealth Pillar.



Morobe Province - Winima Village - Field team leader doing a toksave with community members.

Aims

The overall aim of the Baseline is to understand the experience of resource governance and development impacts in PNG's extractive provinces.²²

For the extractive sector, it is hoped that the empirical data collected through this assessment can support policy and practice reforms that lead to more sustainable and inclusive development impacts. Establishing a baseline of how landowners and communities experience resource governance and development impacts also allows the sector to compare the “current state” with “future states” to determine the impacts of upcoming projects, initiatives and policies.

For APEP, the Baseline is helping to build relationships and networks with sector stakeholders. This is particularly important given APEP is a new development partnership supporting governance in PNG's extractives sector. The findings from the Baseline will also inform the design of upcoming APEP initiatives and establish indicators for ongoing monitoring, evaluation and learning (MEL).

²² The Baseline was designed through a collaborative effort between sector stakeholders and implementing partners of APEP. For more information on the methodology, refer to the Baseline Methodology Design Document prepared by Square Circle.



Baseline Aims

Extractive Sector

- Listening to local perspectives on resource governance and development impacts.
- Generating foundational research to inform policy and practice.
- Assessing the impacts of projects, initiatives and policies by tracking perceptions of landowners and communities over time.

APEP

- Creating awareness of APEP's Sustainable Governance of Natural Resource Wealth Pillar.
- Building subnational relationships and networks.
- Informing the design and delivery of upcoming APEP initiatives.
- Establishing indicators for participative monitoring, evaluation and learning (MEL).

Development partners supporting the governance and regulation of the extractives sector in PNG have tended to focus on the state or macro-economic level,²³ often with an infrastructural or technocratic focus on sector organisation, objective setting, rulemaking and enforcement, and capacity building.

Our focus on governance for the Baseline is how landowners, impacted communities and citizens at the subnational and local level experience the key governance concepts of **transparency, accountability and participation**, which are common to global transparency initiatives such as the EITI. In the PNG context, the **effectiveness of agreements** and **relationships between stakeholders** were also seen as key governance concepts that could impact development outcomes at the subnational level.²⁴

As part of this subnational and local focus, we have also investigated how select **cultural concepts used across PNG** play an active role in consultation, participation, decision making and in how development impacts stemming from resource extraction are perceived. The cultural concepts of governance used in the Baseline are *wok bung*, *wok kaston*, *hanmak*, *pasin*, *luksave*, *wan bel*, *bihain taim* and *tok save*.²⁵

23 Togolo, M. (2006). The 'Resource Curse' and Governance: A Papua New Guinean Perspective in S. Firth . Globalisation and Governance in the Pacific Islands. ANU Press. Canberra.

24 One reason for the subnational focus is that global studies have found governance priorities are often more locally focussed and immediate than those often delivered at the macro-level. See, for instance, Square Circle and Voconiq. (2023). *Independent Evaluation of the Extractive Industries Transparency Initiative*, . <https://www.eitiopenevaluation.org/reports/>.

25 These cultural concepts are defined on page 77.



New Ireland Province - Lihir - Playing a drum.

These concepts take into consideration how local communities frame their ideas of development and resource governance around reciprocity, dependency, community harmony and relationships.²⁶

Just as we are not suggesting that the Baseline represents a comprehensive assessment of the governance of the extractive sector in PNG, we are also not suggesting that the cultural concepts measured in the baseline represent a comprehensive framework or catch-all explanation for 'cultural governance' in the mining, oil and gas sector. This is because different ethnic and cultural groups in PNG have different customs, traditions, beliefs, rules, frameworks, concepts and practices that impact how communities interpret natural resource projects. Further illustrating this difference is that local rules and frameworks of customary governance are by no means static— they are continuously shaped by communities themselves as they interact with each other and 'outside' systems such as the state sanctioned regulation of the natural resource sector.²⁷ Mining, oil and gas projects also create new actors and forms of governance *within and across* the boundaries of lease areas.²⁸ In PNG, resource governance is both complex and dynamic.

26 These cultural concepts have also been shaped by the commonly held cultural values found throughout PNG and are evident in the 'PNG Way (Narokobi) and through the work of the Melanesian Institute. We have also adapted and enhanced the cultural governance framework used in the UN Bougainville Autonomy Review Report. Banks, G. (2021). Resource security in Papua New Guinea: Linking resources, development and security. Development Bulletin 82. pp. 61-64.

27 Torres-Wong, M and Jimenez-Sandoval, A. (2022). Indigenous resource governance as an alternative to mining: Redefining the boundaries of indigenous participation. The Extractive Industries and Society 9.

28 Bainton, N. and Skrzypek, E. (2021). An Absent Presence: Encountering the State Through Natural Resource Extraction in Papua New Guinea and Australia, The Absent Presence of the State in Large Scale Resource Projects. ANU Press, Canberra, Australia.

Instruments

Four assessment instruments were designed to assess these aims with the overall goal of understanding the experience of resource governance and development impacts at the subnational level in PNG. Each instrument is described in more detail in the Baseline Methodology Design Document provided in Annex A.²⁹

Resource Governance Instrument

The Resource Governance Instrument (RGI) is a multi-part survey and interview guide designed to measure perceptions of resource governance and development impacts at the provincial and local level. The RGI draws on globally accepted precepts of resource governance such as transparency, accountability and participation. It also measures attitudes towards local cultural concepts such as 'wok bung', 'luksave' and 'hanmak'. Development impacts are measured by global ratings across a range of impact areas including health, education, economy, infrastructure and culture.

Disability Assessment

A dedicated Disability Assessment Tool was developed to assess the experience of persons with disabilities including the barriers they face in their daily lives. The tool also seeks to understand the support currently available and the broader service delivery context for people with disabilities in resource provinces.

Local Capacity Assessment

The Joint Organisational Capacity Assessment Tool (JOCAT) was developed to assess the capacity needs of Civil Society Organisations (CSOs) and landowner associations at the subnational level. The JOCAT is an established and tested tool for assessing capacity in CSOs, based on the Local Organisation Capacity Assessment Process, previously used by AusAid. The JOCAT examines organisational capacity by focusing on governance and leadership, partnerships and stakeholder engagement, financial management, program management, human resources and organisational resilience and sustainability.

Digital Storytelling

Digital storytelling was included as a means of capturing rich qualitative data on resource governance and development impacts. Stakeholders were interviewed and their stories were captured on video for inclusion in analyses. A series of short impact documentaries has been produced to accompany this report. The videos can be accessed from the link below.



²⁹ The full results for the Disability Assessment are provided in the companion report. Our focus on disability inclusion in this report is on how persons with disability experience resource governance and development impacts.

Digital Storytelling



Perceptions of Resource Governance and Development Impacts in PNG

This video showcases the findings of the Baseline Assessment and documents the data collection journeys for each instrument.



GEDSI Perspectives on Resource Governance in PNG

This video focuses on the experiences of women, people with disabilities and marginalised groups living near resource projects.



Sustainable Governance of Natural Resource Wealth Project Highlights.

This short video showcases some key projects of the Sustainable Governance of Natural Resource Wealth pillar, including the ASGM Demonstration project and the Baseline.

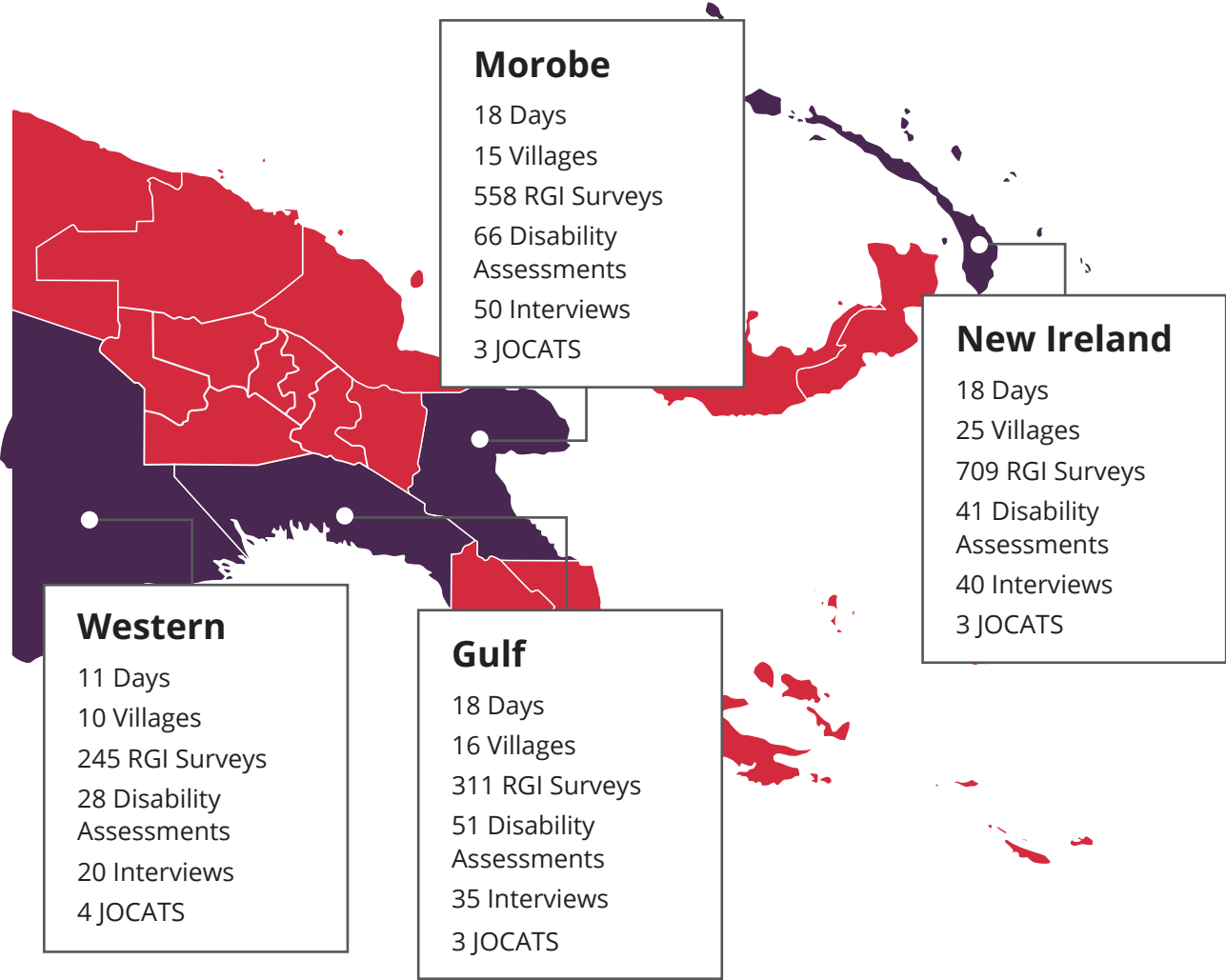


Sustainable Resource Governance in PNG: The Baseline Story

This video presents the programmatic context of the Baseline, and provides a behind-the-scenes view of how the Baseline was planned and implemented.

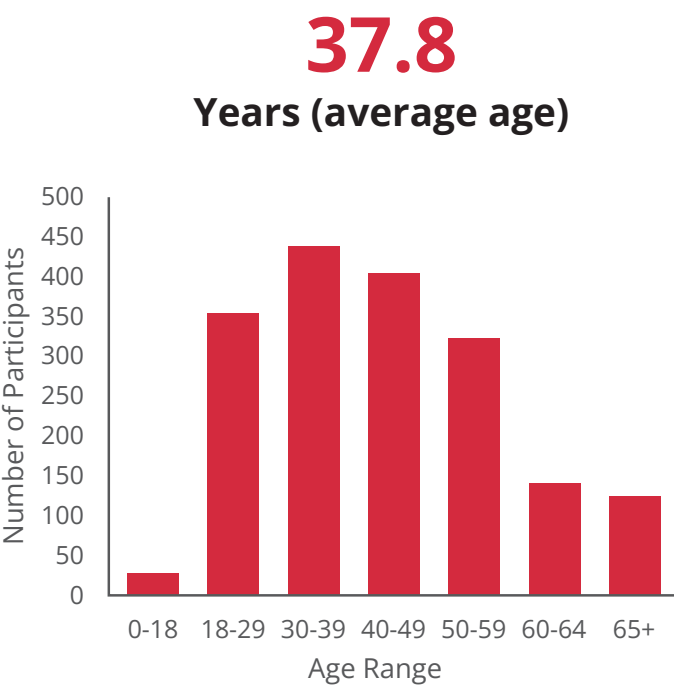
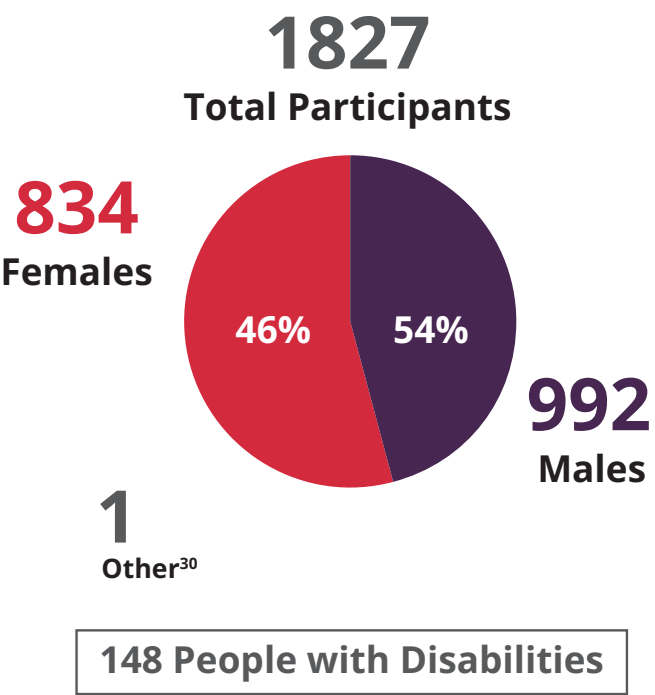
Sample

Baseline fieldwork was carried out in Morobe, New Ireland, Gulf and Western Province between 4 March and 26 April 2024. These provinces were selected for the Baseline due to the presence of mining, oil and gas projects in these regions. Two to three locations in each province were sampled, with participants from communities, civil society, non-governmental organisations, government and extractive companies. The fieldwork was co-led by Square Circle and Tanorama Limited with support from Abt Global. A summary overview of the data collection undertaken in each province is provided in the map below.



65 Days in Provinces	62 Villages Across PNG	1827 RGI Surveys
Over 200 Interviews	186 Disability Assessments	13 JOCATS

RGI Sample Characteristics



- 551** Landowners (Members)
- 74** Landowners (Executive)
- 41** Local Level Government
- 61** Mining Company Employees
- 82** CSO Members
- 142** Lanco Employees

- 762** Participants from Impacted Communities³¹
- 1041** Participants from Non-Impacted Communities

³⁰ The possible answers for 'What is your gender?' were Male, Female, and Other. In Morobe, 1 person answered 'Other', where every other participant answered 'Male' or 'Female'.
³¹ These numbers together total less than 1827 because location information was not collected for some participants.

Gender Equality, Disability and Social Inclusion

The negative impacts of extractive projects are often disproportionately experienced by women, PWD, and at times youth and other groups who might be excluded from decision-making processes.

APEP's Sustainable Governance of Natural Resource Wealth Pillar supports multi-stakeholder governance approaches that strengthen social inclusion and reduce inequalities around PNG's resources sector. The approach draws on an 'intersectional lens' where attention is paid to power differentials and barriers to participation in resource governance. The pillar also focuses on building the capacity of women, youth and PWD to ensure that they are able to more effectively engage in subnational and national resource governance forums, platforms and networks.

For the Baseline, our approach to gender equality, disability and social inclusion (GEDSI) means that our methodology ensures that the views of diverse groups are captured in a safe and inclusive way. In the field, deliberate measures were taken to ensure meaningful inclusion of those that are sometimes excluded from resource governance.

The Baseline's 'twin-track approach' to GEDSI meant employing both a disability specific instrument (the disability assessment) as well as a mainstreamed approach where disability considerations were included in other instruments (the RGI surveys, JOCAT and digital storytelling).

Deliberate measures were also taken to ensure the voices of women were captured in the Baseline, including ensuring gender balance in the field team and the sample.



Gulf Province - Karaeta Village - Community members filling out the Baseline Survey.

Several specific measures were taken to support GEDSI in the Baseline:

In some locations members of the RGI team were embedded in the Disability Team and vice versa as part of the twin-track approach. This helped to mainstream disability and social inclusion, allowing PWD to have their opinions heard in the RGI, and also enabling more specific disability assessments to be conducted.

Enumeration teams were provided with social safeguards training by the APEP GEDSI representative, and codes of conduct signed.

Whilst not perfect, a gender balance in the data collection teams (RGI, JOCAT and Disability) contributed to a satisfactory gender split in the sample and allowed women's voices to be heard across the instruments — women could talk to women if they wanted.

Local liaison officers and community leaders supported participation of people with disabilities, women, youth and the elderly in data collection. This increased the opportunity for inclusion.

Having female Field Team Leaders, who could lead tok saves, helped challenge wider gender norms in a practical way without having to mention the term 'gender' or be intrusive.

In some locations, referral pathways were provided for disability and domestic violence concerns and issues if they were needed.

2

Findings

Note for the reader

This section presents findings from the RGI and the JOCAT, including summary results from statistical tests. Annex A: ‘Baseline Summary Data’ provides detailed outputs from statistical tests including how to interpret them.

Brownfield and Greenfield

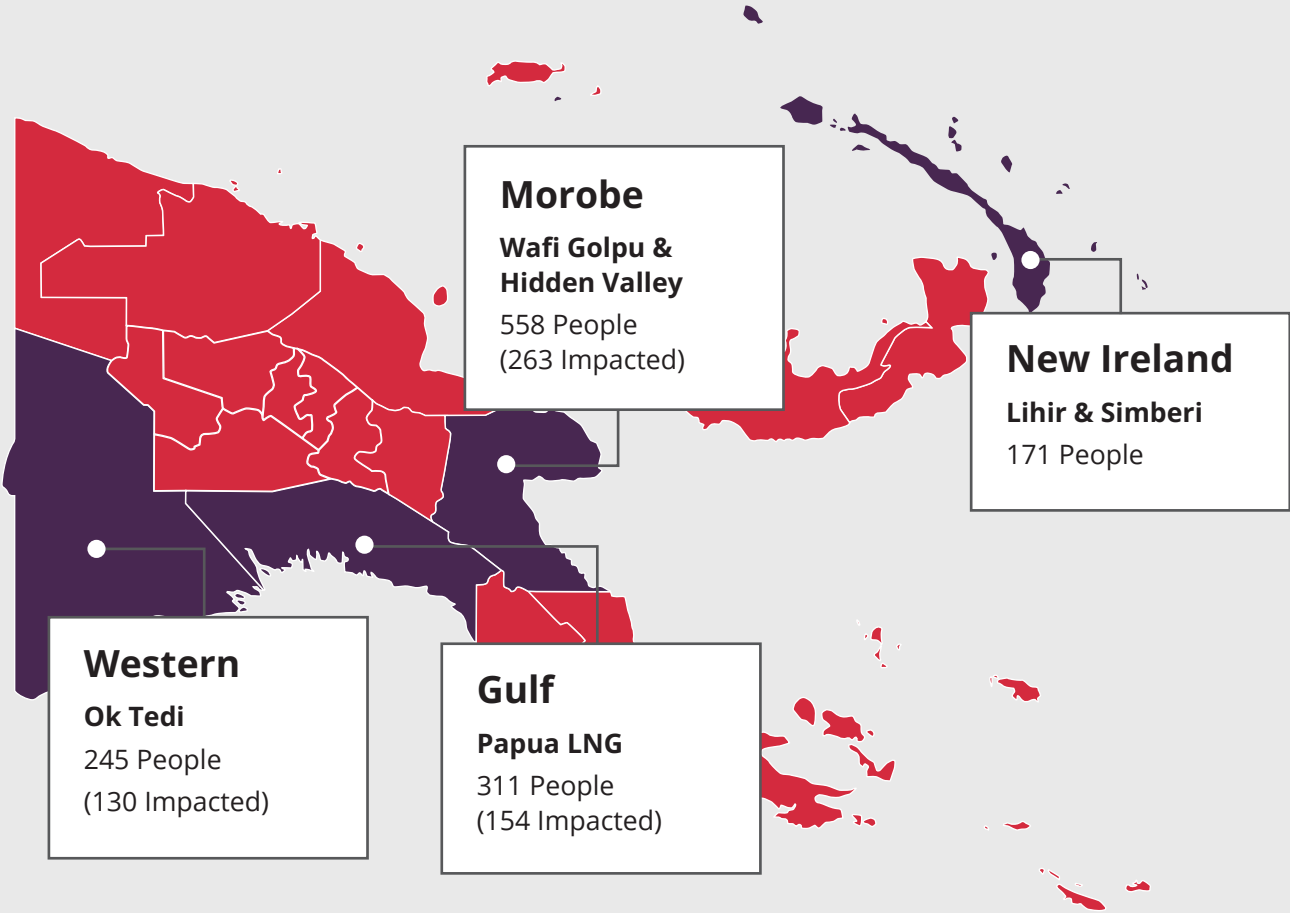
This assessment was conducted in a range of locations and project areas. Some were established projects that are currently producing (e.g., Lihir, Hidden Valley and Ok Tedi) and for this study these are classed as ‘brownfield’. Projects not in production were classed as ‘greenfield’ (e.g., Wafi Golpu, Papua LNG).

Impacted and Non-Impacted

Throughout this section, we refer to ‘impacted’ and ‘non-impacted’ people and communities. These terms have different meanings across the extractive sector and are interpreted in different ways by people living in project areas. Nonetheless, for the analyses conducted for the Baseline, impacted includes people in the ‘project area of influence’ of brownfield and greenfield projects (e.g., the Special Mining Lease (SML) or other leases, inside the area of influence or impact areas as denoted in a MOA, UBA, Mining Development Contract or other contract or agreement; or inside an impacted area as specified in a Ministerial Determination). Non-impacted includes all other participants.

Gender

Participants were asked to specify their gender, and were given the options of ‘male’, ‘female’, and ‘other’. One participant answered ‘other’. For findings about gender, we are referring to people who identify as male or female. Unfortunately, the sample does not include enough people who identify as ‘other’ to draw any accurate conclusions about non-binary persons.



*Note these figures total 1823 (rather than 1827) because data on four participant’s provinces were not gathered.

The net impacts of extractive projects are experienced negatively.

Overall Impacts

Across Morobe, New Ireland, Gulf and Western Provinces, people were asked to rate the impact of mining, oil and gas projects on them, their community, and PNG. Overall, the net impact of mining, oil and gas projects in PNG was perceived as negative.

To determine the overall impact of mining, oil and gas, we asked participants to rate the impact of the sector on 'you and your family', 'your community', 'the province', and PNG. It was found that people, on average, were either negative or very negative about

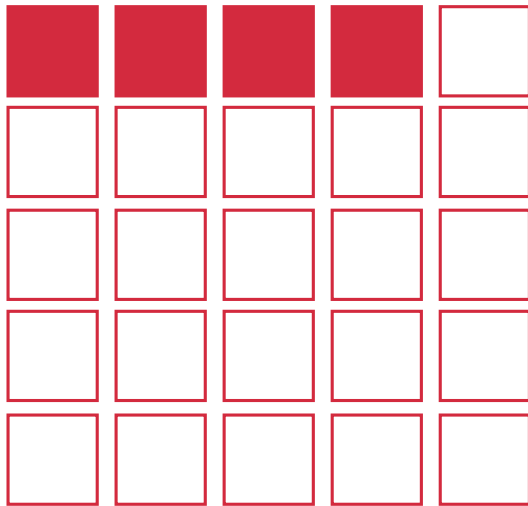
the impact of mining, oil and gas on their province, and themselves and their family. People were less negative about the impact on the community, and almost neutral about the impact on PNG.

The data illustrates that people were able to distance themselves from the more immediate negativity (themselves and their family) and see the wider benefits that mining, oil and gas projects can bring to PNG. These benefits were generally seen to be jobs, revenue from projects and more 'development' for PNG.

Despite the perceived negative impact of mining, oil and gas projects, people still believe that the extractive sector can deliver positive development impacts for PNG.

The qualitative data showed this 'looking beyond' the immediate horizon was however tinged with some negativity in that people beyond the impact area of mining, oil and gas projects - particularly in Port Moresby and provincial capitals - were perceived to be benefiting more than 'people on the ground.' This points to a perception that there is a disconnect between benefit flows coming from the national to the sub-national and local levels.

This negativity flowed through to 328 people out of 1827 (18%) were strongly supportive of mining, oil and gas.



perceptions of the overall impacts of mining, oil and gas at the provincial level where in the qualitative data people expressed that development impacts in terms of economic opportunities, services and infrastructure, were not being delivered at the provincial level. This finding is in line with the negative and very negative ratings of the development 'capitals'.

The qualitative data indicated that the very negative ranking on the most immediate scale (me and my family) was expressed in both social and economic terms. That is, from the qualitative data people 'outside' of agreements and royalty payments said that they and their families did not get any benefits from projects as services were not being delivered, whilst those 'inside' agreements perceived they did not receive as much as they thought they should; and that there were often disputes over payments and agreements within their family. Another underlying frustration driving this rating was that of supply chain opportunities, with some people feeling like they 'miss out' on employment and business 'spin-off' opportunities.

"I support mining, oil & gas in Papua New Guinea, but we have not witnessed or experienced any benefits from these projects."

Female,
New Ireland Province

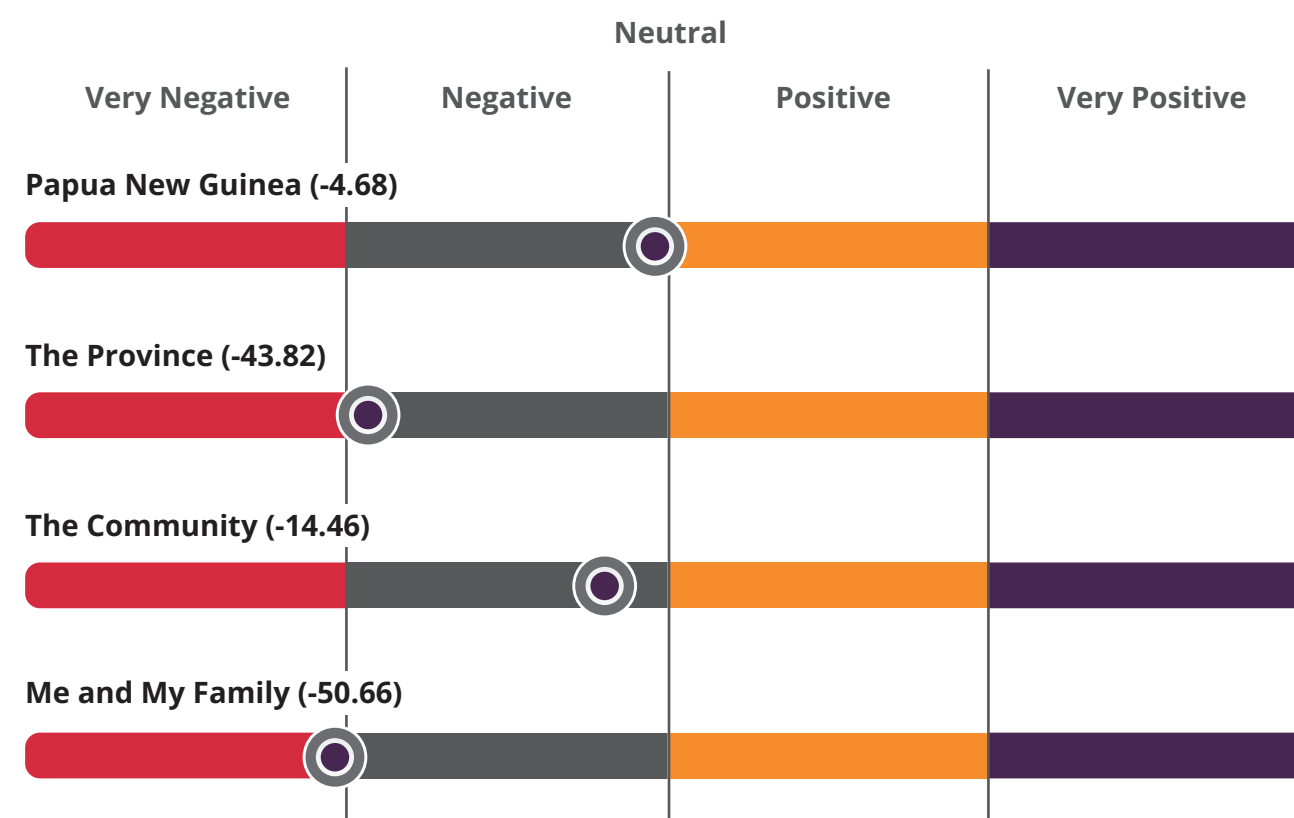
Responses to the impacts on the community, which were not rated as negatively as the 'me and my family' scale, appeared to reveal a type of 'social comparison'. For instance, some participants expressed that even though they were outside of agreements, other people may be benefiting from them — and this was seen as positive for some in the community. People also suggested that some families

moved their children to better schools, and this was a positive for the community as some children had greater opportunities.

Some people also noted the important contributions that extractive companies make in the areas of education and health services, as well as providing food and support at important cultural events and around Christmas and Easter. However,

these positives were typically juxtaposed with negatives related to social issues (e.g., in-migration to project areas, conflict over royalties and payments, drunkenness amongst people on days when payments are made), and a broader sense that there was not enough development impact or service delivery resulting from mining, oil and gas projects.

Overall Impact Perceptions on PNG, the Province, Community, and Individuals and their Families.



The numbers are mean scores ranging from -100 (very negative) to +100 (very positive) and correspond to participants scores on a sliding scale. For example, the average rating of the impact of mining, oil and gas on 'My Community' was -14.46, which is considered negative.

The Capitals

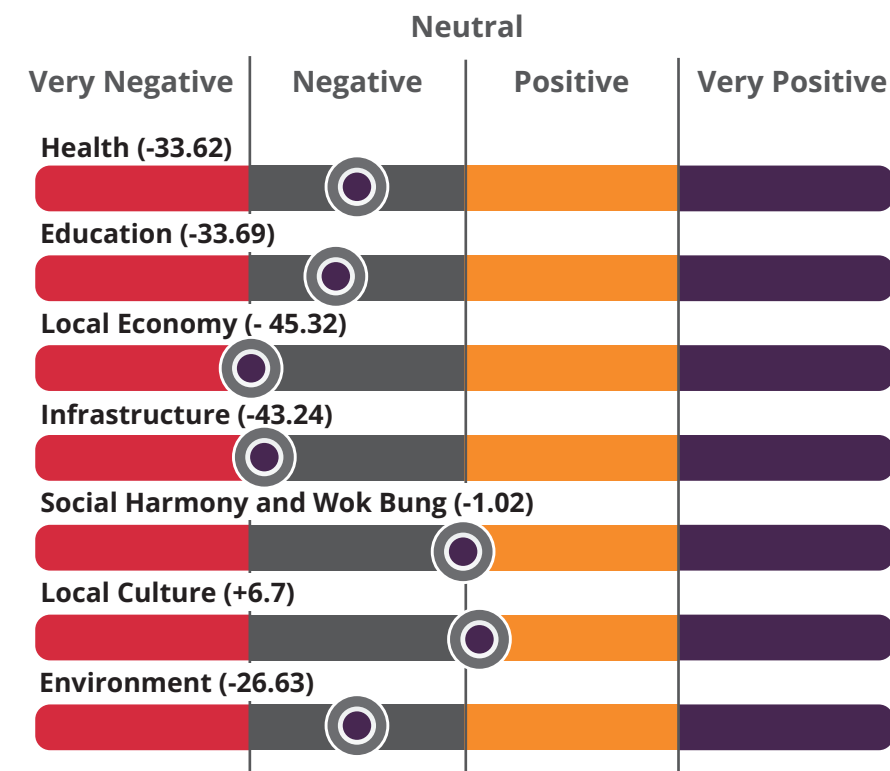
Participants were asked to rate the impact of mining, oil and gas on a range of areas, also known as 'capitals'. These included health, education, local economy, infrastructure, the environment, social harmony and wok bung, and local culture.³²

The areas that mining was perceived to have the most negative impact were **the local economy** and **infrastructure**. There are a few explanations for these findings.

When asked to 'Please indicate the impact that mining, oil and gas has had on people feeling healthy and having access to health services', some participants may have

provided a rating for overall health and health services in their community. The questions specifically asked about the impact of extractive projects on these capitals and enumerators were provided with training to ensure that the capitals were presented explicitly as they relate to the impact of mining, oil and gas. However, it may be the case that some participants thought, 'We do not have enough health services,' and so rated the impact negatively without making the link to mining, oil and gas.

This may also help explain the finding that mining, oil and gas has a negative impact on infrastructure (roads and ports, access to clean water, electricity and telecommunications) and the local economy (local jobs and businesses) and a neutral



The scale here was taken from answers to questions about the impact of mining, oil and gas. For example,

'Please indicate how positive or negative mining, oil and gas projects have been in the province on infrastructure.'

The figures here are averages from across all people in the survey sample.

³² A 'capital' is a stock of something of value, that can be enhanced or depleted. There are various approaches to how capitals are grouped, including the categorisation of 'five capitals'. See Porritt, J. (2005). *Capitalism as if the World Matters*. Routledge.

or positive impact on local culture (*kastom blo ples* and traditions) and social harmony and wok bung (the community working together, social stability, resolving disputes and relationships). People might have been saying, ‘Generally, we lack infrastructure and jobs however, culture in our community is strong’.

Nonetheless, the data does show that the impact of mining, oil and gas projects is perceived to be negative except for the two ‘cultural’ capitals where impacts are neutral (social harmony and wok bung) or marginally positive (local culture).

There are also a few explanations for the comparatively positive (albeit neutral) impact ratings for social harmony and wok bung and local culture. Some participants suggested that when a mining, oil or gas project came to their community, the community came together to communicate and negotiate agreements with the government and developers. Mining, oil and gas projects were also the impetus for some people to investigate clan genealogies and remind people of the importance of *kastom* (custom) and sacred places such as *ples blo Masalai*. However, people also reported that mining, oil and gas projects cause disputes and jealousy in the community and can also exacerbate existing social tensions.

Another explanation is that people perceive mining, oil and gas as primarily a vehicle to get better services and economic and livelihood opportunities rather than to strengthen culture. In other words, while culture is a central part in many people’s lives in PNG, people equate the development impacts associated with



mining, oil and gas more in terms of service delivery and improved economic outcomes.

This fits with the finding that people perceive the ‘traditional’ development capitals of health, education, infrastructure and the local economy as being negative. The negativity points towards benefits and opportunities that are thought to come from mining, oil and gas not being realised at the local level. This gap was reported by some participants as revenue and payments from mining, oil and gas being ‘eaten up’ at the national and especially provincial government level. For many, sense that revenues and profits were “going

elsewhere” was a reason for the perceived lack of services and economic and livelihood opportunities at the local level.

Overall, the ratings across the capitals point to the need for better service delivery and development outcomes in the areas of health, education, economic development, infrastructure and environmental management. The findings also point towards a need for more transparency and accountability regarding payments and benefits at the local, provincial and national levels. More transparency and accountability would potentially give local people more

“Mi sapotim mining long kamap na em bai sapotim mipela long education bilong ol pikinini bilong mipela kamapim wok opportunities long ol youngpela manmeri.”

I support mining as it will provide better opportunities to educate our children and create jobs for our youths both men and women.

Female, Morobe Province

reasons to support the extractive sector for the development opportunities it can bring. This is important because even amongst the negative perceptions of the capitals, both the qualitative data as well as the data on support for the sector (see page 52) indicates that people see the extractive sector as a means to provide opportunities and better services for their communities; yet at present, this opportunity is not being realised for most.

Impacts Across

Capitals

It is likely each person has an overall perception of mining, oil and gas, and we tapped into these overall perceptions. If this is true, we would see a relationship between the impact questions, and between impact and support. If someone is negative about mining, oil and gas, they should say it has a negative impact on health, the environment, the local economy, and they should also support it less. That is exactly what we found.³³

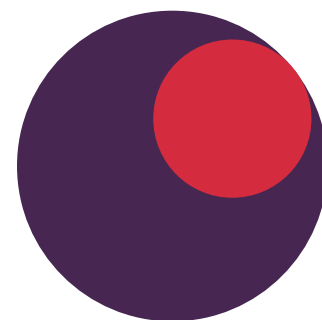
When interpreting the findings, this is important to keep in mind. While people may have rated the impacts very negatively, this may reflect their overall opinion of mining, oil and gas, rather than its impact. The community perception of mining, oil and gas is critically important as it tells us whether the needs of the community are being met or not. However, sentiment may not necessarily capture the efforts of stakeholders at the community level, where extractive projects do deliver outcomes and positive impacts such as infrastructure and support for the local economy through jobs and business opportunities, livelihood programs, and compensation and benefits payments.

Finally, perceptions of local culture and social harmony and wok bung were found to be unrelated to perceptions of other areas. This may point to the importance of culture and its relation to social harmony in PNG, where a mine with a net negative impact on a community still does not affect the strength of culture and social harmony in that community. People also see the extractive sector as primarily a vehicle for better services and economic and livelihood opportunities, rather than an opportunity to strengthen culture. In other words, while culture is a central part in many people's lives in PNG, people equate development impacts associated with mining, oil and gas more in terms of service delivery and improved economic outcomes.

33 Support was found to be correlated with each one of the impact areas (all p's < .001).

**706 people
out of 1827**

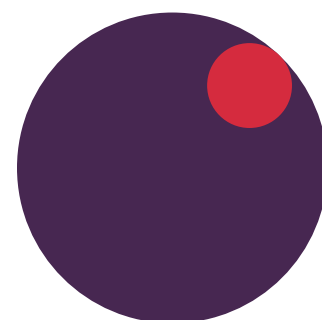
said that mining, oil and gas had a positive impact on PNG (39%).*



*400 people were neutral about the impact of mining, oil and gas on PNG.

**95 people
out of 1827**

said that mining, oil and gas had a very positive impact on them and their family (5%).*



*Most of these people were men who were part of an agreement, and people who were aspies (from the area).

Impacts Across Groups

Across the different groups that participated in the Baseline, there were some differences in the experience of the impacts of mining, oil and gas³⁴.

Overall, people in impacted communities of mining, oil and gas projects were more positive about the impacts than people not in impacted communities. This could be because people in impacted communities are more closely connected to the economic and livelihood opportunities associated with mining, oil and gas projects.

Interestingly, people in impacted communities of greenfield projects were more positive about the impacts than people in impacted communities of brownfield projects. This will be explored in other findings, though it hints at an overall increased positivity, support and optimism that is seen at greenfield sites. One reason for this comparative optimism is that greenfield communities may be more focused on the development outcomes that are possible through extractive projects, including the economic and livelihood benefits that the community is hoping that the project will bring. It is worth noting that while they were more positive, people in impacted communities of greenfield projects were still overall negative about the impacts of projects.

The same was true of members, employees and executives of landowner associations, where their perceptions of impact were more positive than non-members. This will also be explored throughout the findings, where members, employees and executives of landowner associations were found overall to be more positive about mining, oil and gas, including how projects are run. This is most likely due to the proximity and agency that landowners have when it comes to resource projects in PNG. Compared to non-landowning community members, landowner voices are more likely to be heard in discussions about the project, and their needs are more likely to be met by agreements, initiatives and programs.

The elderly (persons aged 64+) were also found to be marginally more positive about the impacts of mining, oil and gas. This could simply reflect the phenomenon that in some cultures older people are more optimistic than younger people.³⁵ However, qualitative data from the Baseline suggests that the elderly perceived mining, oil and gas to offer livelihood and economic opportunities to the younger generations.

34 Whenever group differences are mentioned throughout, they are significant at the level of $p < .05$. Most of the time, group differences are significant at the level of $p < .001$. This means that the difference between the groups was measured through means comparison using either t-tests, analysis of variance (ANOVA), Chi-Square, or Wilcoxon's rank-sum test, depending on the groups being compared. For linear data (age and time spent in the province), correlations were used.

35 You, J., Fung, H. H., & Isaacowitz, D. M. (2009). Age differences in dispositional optimism: A cross-cultural study. *European Journal of Ageing*, 6, 247-252.

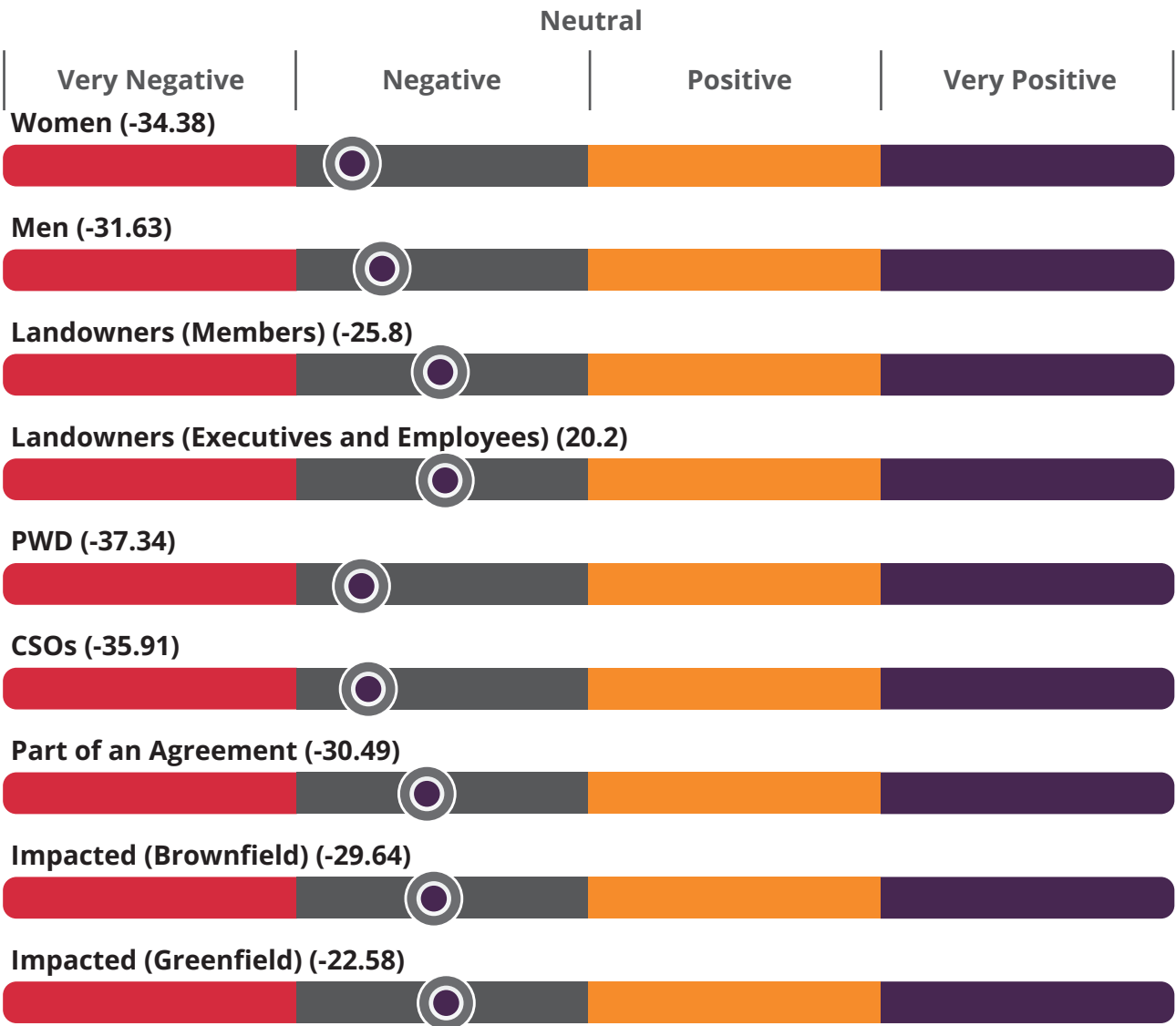
It is worth noting that while these groups were more positive about the impacts of mining, oil and gas, none of them reached a point where their perceptions were considered neutral or positive.

Among the provinces, it was found that people in Western province were most positive about the impacts of mining, oil and gas. People in Morobe were similarly positive, where people in Gulf were less

positive, and people in New Ireland were the most negative. This result from New Ireland could tentatively be explained by the large portion of the sample that is comprised of people from non-impacted areas, who were less positive about mining, oil and gas in the Baseline.³⁶

Again, none of the provinces reached a point that could be considered neutral or positive.

Overall Impacts Across Different Groups



Note: Not all groups are included in this figure. For data on the other groups, refer to Annex A.

36 When these people are excluded from the figure, perceptions of impacts do improve, though they remain more negative than Morobe and Western Provinces.



Morobe Province - Kaisenik Village - Bridge to the village.



People living in impacted communities of brownfield projects had more access to electricity than those who were not living in these areas.



25% of people living in impacted communities of brownfield projects still access their water from the river.



Almost half of people (49%) in impacted communities of brownfield projects had accessed health services provided by mining, oil and gas companies.



More than half of people (53%) could not access the internet in impacted and non-impacted communities.



213 people said that they or someone in their family had a business connected to an extractive project.

People are supportive of the extractive sector.

People were asked to indicate the extent to which they supported mining, oil and gas in PNG by responding on a sliding scale from 'Very Negative' to 'Very Supportive'. Overall, people said that they were supportive of mining, oil and gas in PNG. This means that despite the impacts of resource projects being perceived as negative, people are still supportive of the extractive sector.

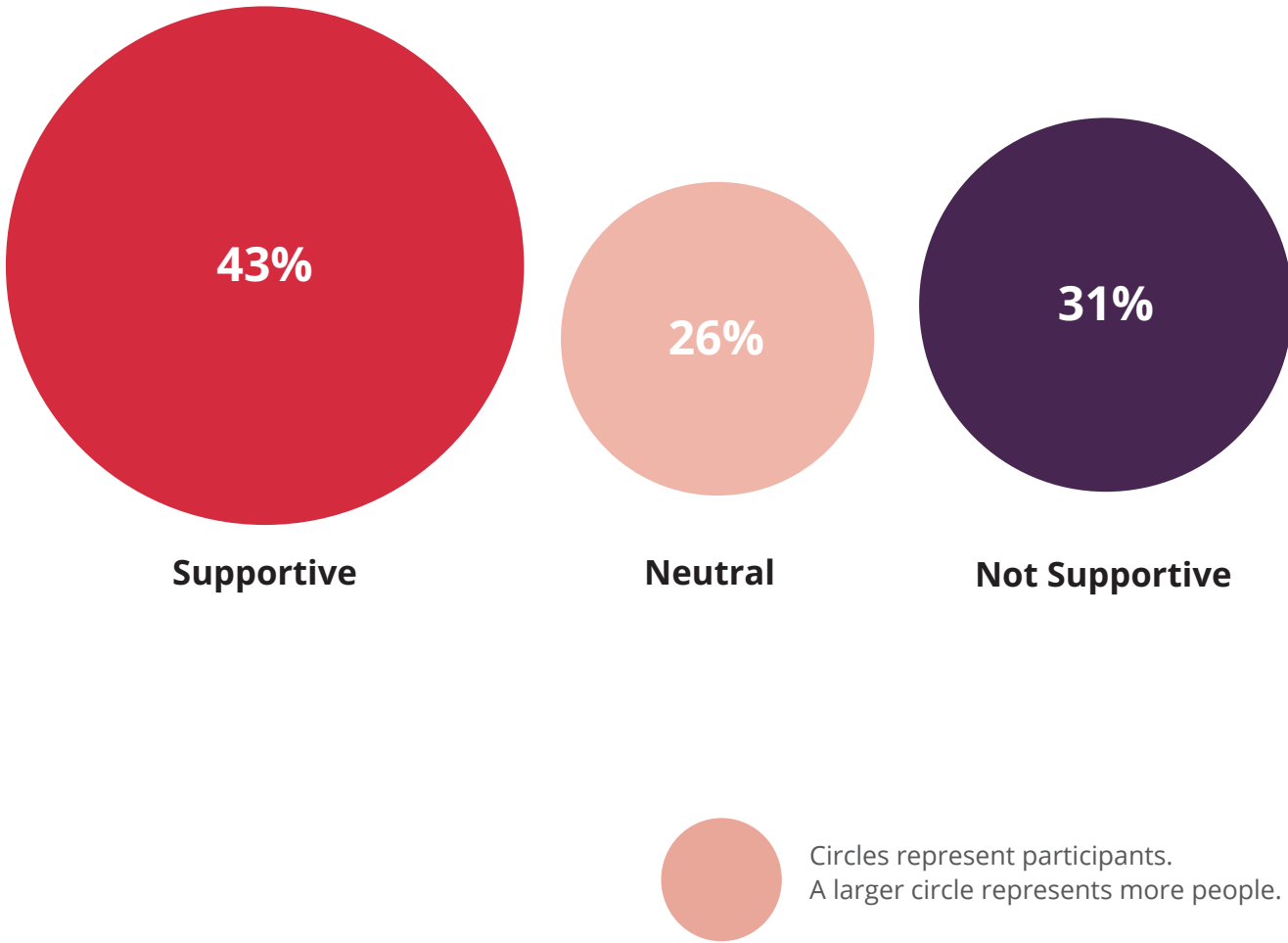
The simplest explanation for this is that while people think extractive projects have not yet delivered the development outcomes that people in PNG have hoped for, people remain supportive of the sector and optimistic about the development impacts and outcomes it can potentially deliver.

There are a range of possible reasons for this, however a couple stood out in the qualitative responses from participants. First, some people, especially in rural locations, see the sector as one of the only avenues leading to

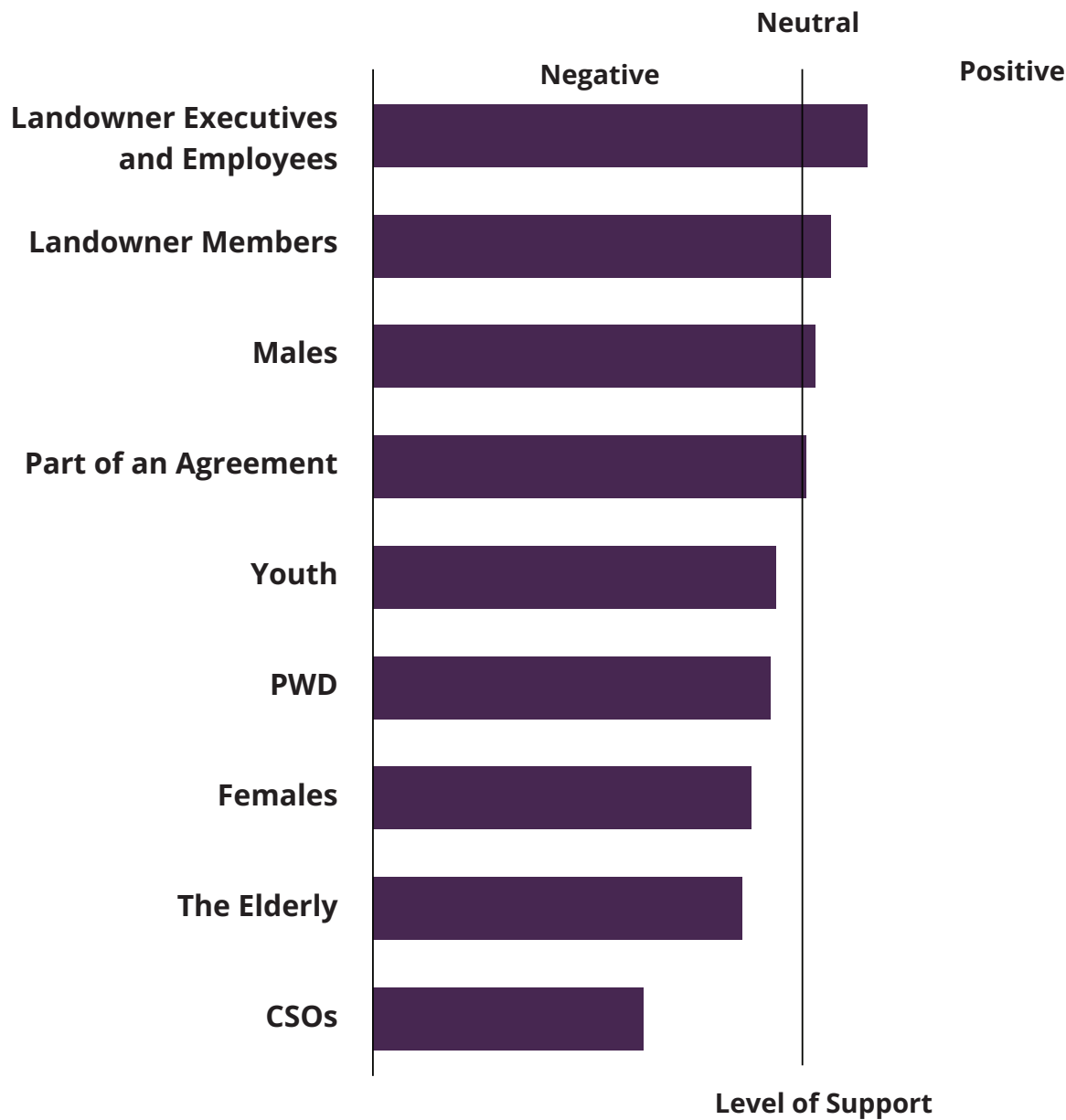
economic and livelihood opportunities—not only in the short term, but also for their children and future generations. Second, even if some people believe that the impacts of extractive projects has been negative particularly around project areas, they may believe that extractive projects have the potential to deliver better development outcomes for future projects and/or the nation.

People in their qualitative responses indicated there were good and bad aspects to the sector. Some participants said that they supported the sector for the economic and livelihood opportunities it can bring, but this was balanced by these opportunities not being forthcoming or realised. Others were positive for the same reasons and that the sector can 'bring development' but this was balanced by environmental concerns leading to a neutral rating.

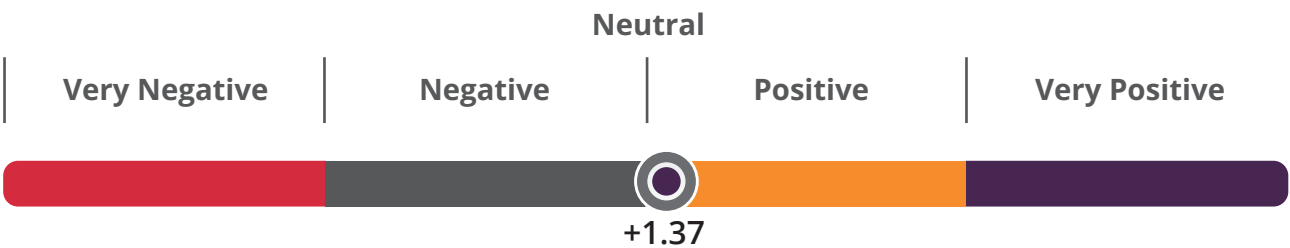
Overall Support for Mining, Oil and Gas Across All Participants



Support for Mining, Oil and Gas Across Groups



Overall Support for Mining, Oil and Gas in PNG Across all Participants



Support Across Groups and Projects

Different groups in the population showed different levels of support for mining, oil and gas. These differences point to important differences in how groups are represented in mining, oil and gas projects, and also point towards future interventions and initiatives for making benefits more equitable and sustainable.

Members of Civil Society Organisations (CSO) were the least supportive of mining, oil and gas. This could be because CSO members were part of organisations that made them more aware of the potential negative impacts of the extractive sector. For example, possible environmental concerns or a lack of transparency or equity surrounding agreements and payments.

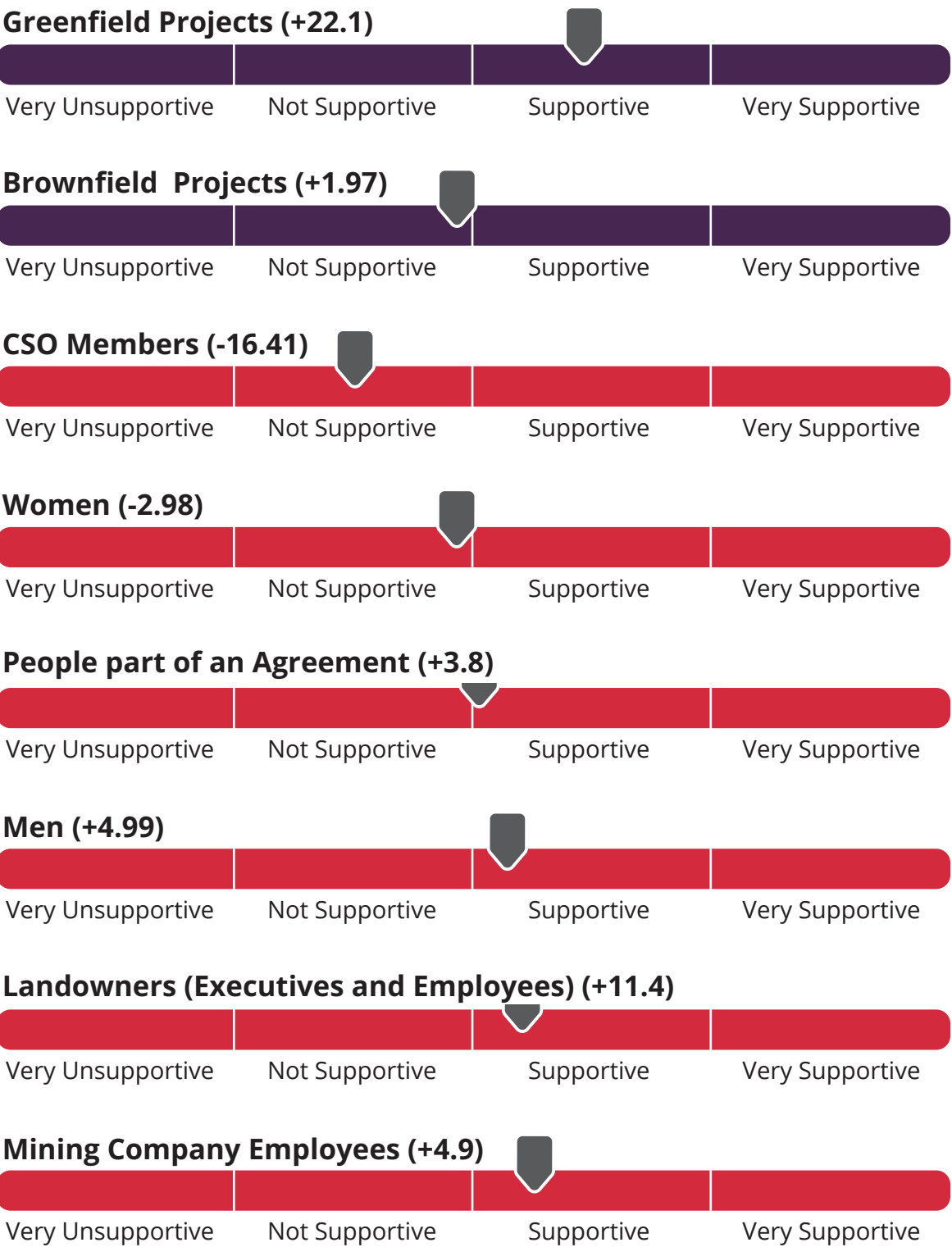
The next least supportive groups were women and the elderly, who were just below neutral. This aligns with the finding that women perceived that they were not given as much opportunity to participate in discussions around mining, oil and gas—and when they did, their opinions were not valued as much as men (see page 61).

People in impacted communities of greenfield projects were more supportive than those near brownfield projects. This again may reflect an overall hope in PNG for what resource projects can bring to families and communities. Those near brownfield projects may be less supportive because they perceive the project may not have delivered the development impacts and opportunities that people in the community were hoping for.

In impacted brownfield communities, there may also be intra-clan and family disputes that have been created or exacerbated through agreements and royalty payments, social disharmony from in-migration, and environmental issues. There are also lifestyle diseases and other negative health outcomes that can come from a benefits and royalties focused livelihood strategy, including eating more processed food.

Across the different provinces, Gulf was the most supportive of the sector. Following this, Morobe was the next most supportive, and Western was similarly supportive. For each of these provinces, support was just above neutral, where support in New Ireland was negative. This was true even accounting for the large portion of the sample from New Ireland that were non-impacted, where non-impacted people were known to be less supportive.

People in impacted communities of greenfield projects were more supportive than those near brownfield projects. This again may reflect an overall hope in PNG for what resource projects can bring to families and communities.



“How many times do you and your family eat processed food in a week?”

Non-impacted communities



Communities near resource projects



Subnational resource governance is generally experienced negatively.

Resource governance was measured across five key areas that are important for subnational resource governance in PNG: accountability, participation, transparency, relationships and agreements.³⁷ These key areas of resource governance are defined below. Overall, it was found that there is room for improvement in every area of resource governance.

Governance Concept	Definition
Accountability	The extent to which stakeholders are held to account for their actions.
Transparency	The amount and quality of information that mining, oil and gas stakeholders provide to the community.
Participation	How much opportunity community members have for participating in extractive projects and decisions around extractive projects.
Agreements	Whether agreements between the stakeholders and the community are governed well, are fair or cause tension in the community.
Relationships	The relationships between government, mining, oil and gas companies, landowners and the community.

³⁷ See section 1 for a discussion on the different levels of resource governance and for a discussion on why the Baseline focused on subnational resource governance. Factor analysis ensured that we accurately tapped into the areas that we were trying to measure. For example, four questions were asked about accountability, and the smallest correlation (Pearson’s *r*) was .48 (*p* < .001), between accountability at the company level and the power of the community for holding stakeholders to account. This meant that all of the questions were included in an overall ‘accountability index’ which was used to run further analyses. This same process was conducted for each area: if a question did not meet the cutoff, it was excluded, except in the case of relationships between the government and relationships between landowners, which correlated to a level of .37 and a judgment was made to keep this question in the index because of how close it came to the cutoff and its conceptual similarity to the other questions.

Overall Governance

To get a general idea of how people experienced governance across PNG, people were asked if they agreed or disagreed with the statement, 'When it comes to agreements between mining, oil and gas projects and the community, discussions about rules and regulations, planning and community development, these things are generally done well.' Participants were also asked about whether governance had improved in mining, oil and gas projects over the last 5-10 years, whether there was an effective plan for project closure, and whether they were worried about closure of mining, oil and gas projects. **Overall, people's perceptions of governance were negative.**

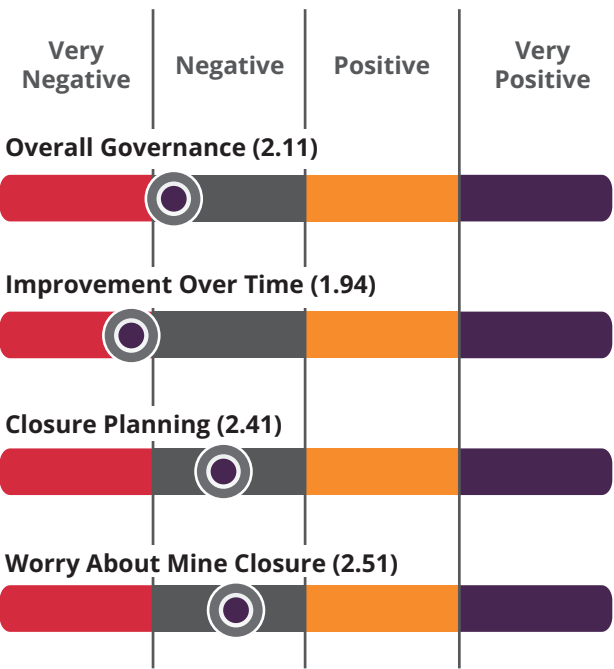
Governance over time was rated the most negatively, where people perceived that governance had not improved in the last 5-10 years.

Landowner association executives and employees were more positive about governance than other groups (women, PWD, members of CSOs). This effect also emerges in other areas of governance, and it could be attributed to the fact that landowner executives and employees have closer proximity to extractive projects. As a result, they may have more information on governance mechanisms, they may be more involved in agreement-making, planning and implementation, and they may be more likely to have their interests accounted for within compensation and benefits arrangements.

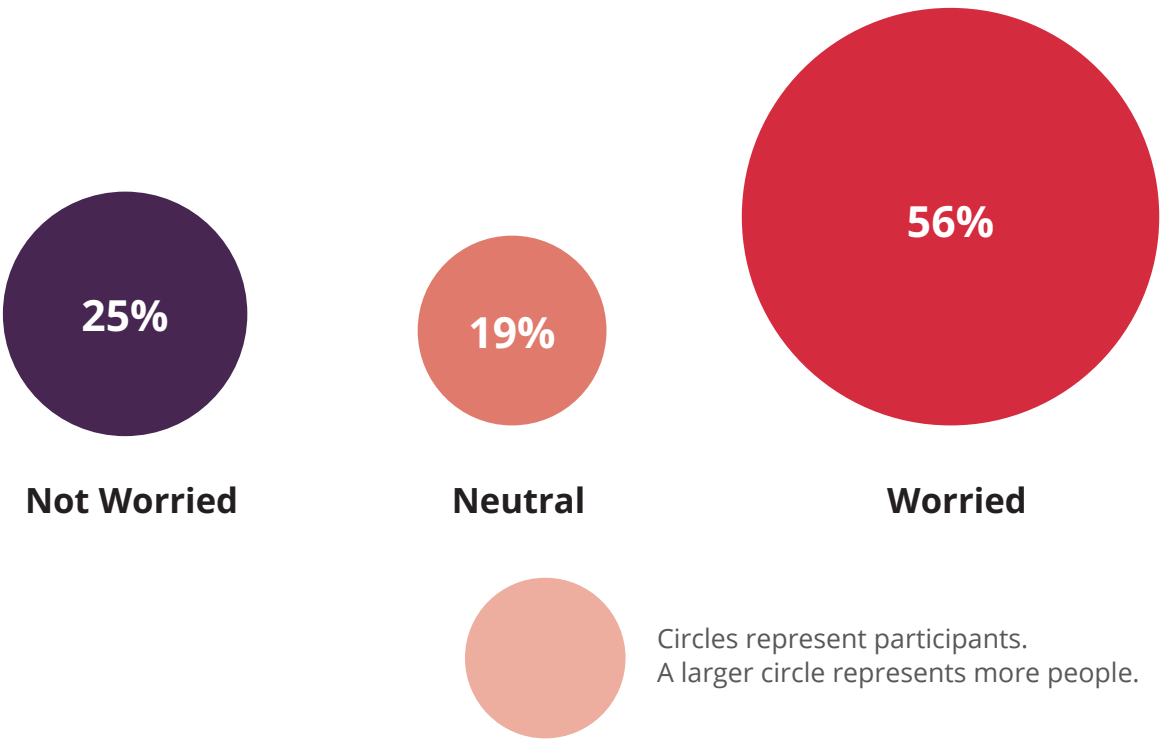
People in impacted communities of brownfield projects were also comparatively more positive about governance. They thought that governance was done better and were more likely to say it had improved over time. In some ways, this paints a

positive picture, where the community develops relationships with stakeholders over time as they are involved in discussions around governance which in turn influences their perception of both governance and its impacts. Having said that, it is worth noting that while people in impacted communities of brownfield projects were more positive, their perceptions of overall governance were still negative.

Unsurprisingly, people in impacted communities of brownfield projects were more worried about mine closure and that things will 'get worse' when the project closes. Reasons for this perception included: people had become reliant on royalty payments; businesses attached to projects were seen as not sustainable after project closure; continued in-migration; and limited employment opportunities for younger people.



Impacts of Mine Closure



Accountability

Participants were asked whether they agreed or disagreed with the statement, 'There are adequate consequences if mining, oil and gas companies do the wrong thing.' The same was asked about landowner associations and the government. Participants were also asked if the community has the ability to hold stakeholders to account (shown as 'Community Accountability' in the graph)³⁸.

Of the five areas, accountability was the highest rated out of all the governance areas measured. Overall, people agreed there were adequate consequences for landowners, the government, and for extractive companies if they were to do something wrong.

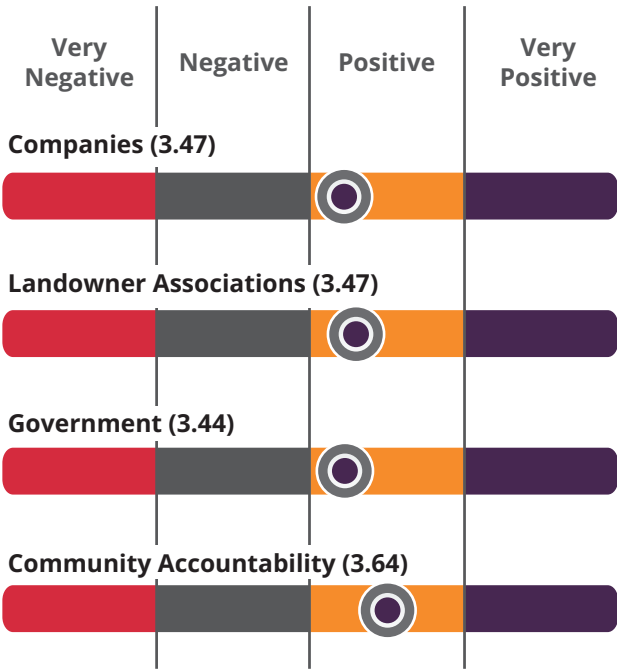
Women, the elderly, CSO members, youth and landowners were equally positive about accountability. People who were not impacted and/or lived near a greenfield site were slightly more positive than people in impacted communities of brownfield sites.

This finding is somewhat surprising given the other areas of governance were all rated negatively. It could suggest that when people were answering the question, they were answering based on their opinion of rules and regulations in the sector. That is, people thought that there were enough policies, rules and regulations around mining, oil and gas.

Qualitative data also indicated that people thought there were enough rules and regulations in place that if people were caught doing the wrong thing, then consequences would follow. However, people reported that the implementation of the rules and regulations could be improved.

This 'qualified' or 'measured' experience of accountability is consistent with the rating of accountability being positive, but **just above neutral**, meaning that there is room for improvement.

Participants rated the accountability of...



38 Graphs were created by taking the average score across all participants. Participants could respond to statements with 'Strongly Disagree', 'Disagree', 'Neither Agree or Disagree', 'Agree', or 'Strongly Agree'. These answers were then converted to numbers (Strongly Disagree = 1, Disagree = 2, etc.), and an average was calculated for each question. This means that 1 is the lowest possible number, 5 is the highest, and 3 is neutral. As an example, the average response to whether there are adequate consequences when companies do the wrong thing was 3.47, which is just above neutral.

Participation

People were asked whether they could easily contribute to discussions about mining, oil and gas with the community, landowner associations, the government, and mining, oil and gas companies. Participants were also asked to respond to the statement 'When I am involved in discussions around mining, oil and gas, I feel like my opinions are listened to' (Acknowledgement). A person may have the opportunity to be involved in discussions around mining, oil and gas, though if they are not listened to, then their participation may not be meaningful.

Participation in mining, oil and gas projects was rated neutral in the locations surveyed. People rated their ability to participate in discussions with their community and clan the highest, followed by landowner associations. People rated their ability to participate in discussions with companies and the government the lowest. Across all of these areas and the extent to which people felt acknowledged, people overall rated participation as neutral.

Landowner association executives and employees rated their ability to participate as the highest among all groups. This could be again due to their closeness to resource projects, and their having more opportunity to participate.

Women, PWD, and people who were not part of a landowner association perceived they had less opportunity to participate than men, non-PWD, and landowner association members, executives and employees.



New Ireland Province - Lihir - JOCAT.

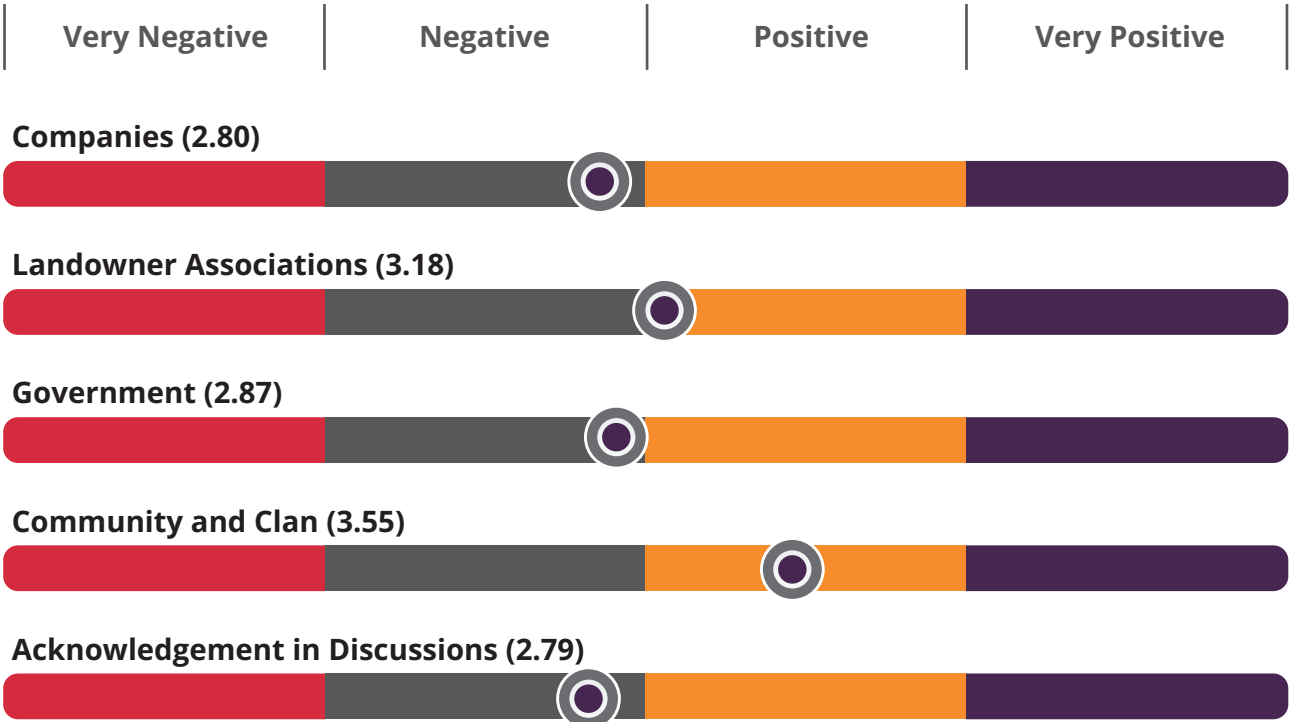
This points to women and PWD perceiving they are being overlooked in discussions around resource governance. Improving opportunities for people from these groups to participate is a way to improve perceptions of impact and broaden the voices heard in the extractives governance process. Women and PWD perceived they were also not listened to as much in discussions, suggesting their opinions are not valued as highly by some stakeholders.

People living in impacted communities of greenfield projects also perceived their ability to participate as higher than those living in impacted communities of brownfield projects. This could reflect that stakeholders in greenfield projects have more discussions with communities. As a project moves through its lifecycle, discussions between stakeholders and communities may reduce, resulting in less communication and a perceived less opportunity to participate.

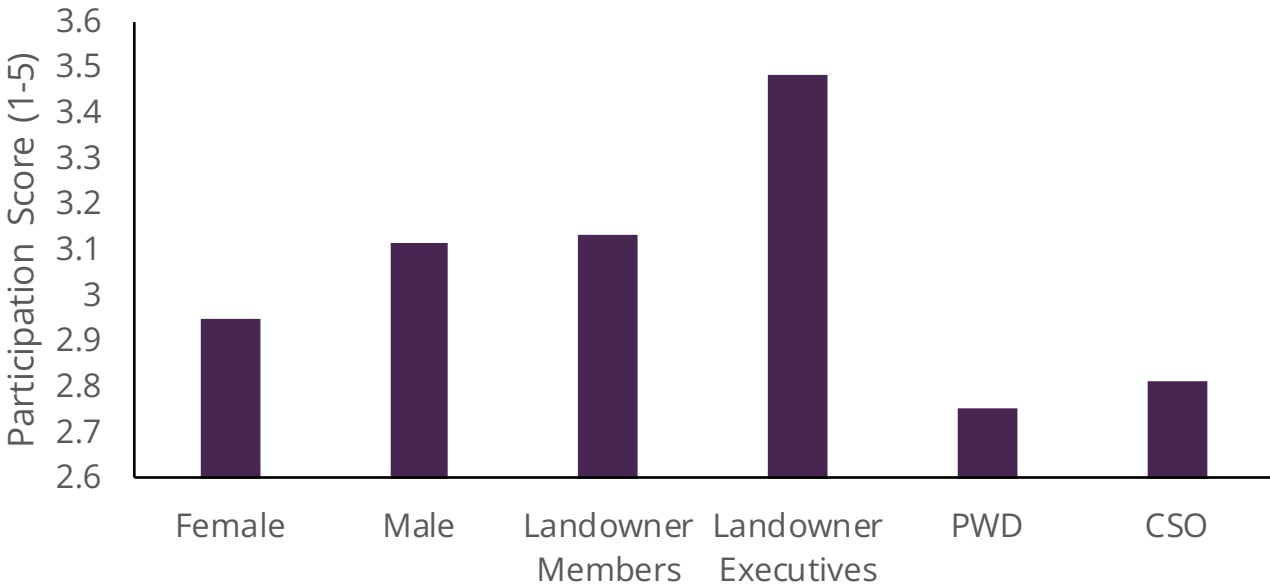
Communication channels may also become more formalised once production begins. Through this formalisation, groups may be excluded as committees and associations are formed. It could be the case that people from groups who are sometimes excluded, for example, PWD and women, are similarly excluded in this more formal communication and participation.

While participation was rated as neutral overall, there is again room for improvement, especially in including groups like women and PWD in a meaningful and substantive way.

Participants rated the extent that they could participate in discussions with...



Participation Across Groups



Agreements

People were asked to respond to the statement, 'The compensation and benefits agreements for mining, oil and gas projects are governed well.' Participants also responded to statements about whether there were a lot of disputes around agreements for mining, oil and gas projects, and whether the compensation and benefits agreements and arrangements for mining, oil and gas projects were fair.

In the locations surveyed, people perceived agreements negatively. Like accountability, there were no major differences in how groups perceived agreements. Regardless of age, gender, landowner status, or PWD, people agreed that there was room for improvement.

This result was somewhat surprising, considering that some groups (i.e., women, PWD and youth) reported they felt left out of the benefits arrangements and agreements, or that the benefits they are supposed to receive do not reach them. These findings suggest that while this may be the case, it is not unique to these groups. That is, most people surveyed around mining, oil and gas projects feel the governance of agreements can be improved. This finding aligns with the perceptions of impact, where people reported an overall negative experience of resource projects.

Another finding was people perceived there to be disputes around agreements for mining, oil and gas projects. While disputes are unfortunately common around extractive projects in PNG, the qualitative data suggests there are two common types of disputes. The first is between stakeholders and communities. The second are within the community – either inter-clan, intra-clan or intra-family disputes that can come from benefits not flowing through to people or feelings that certain groups are being

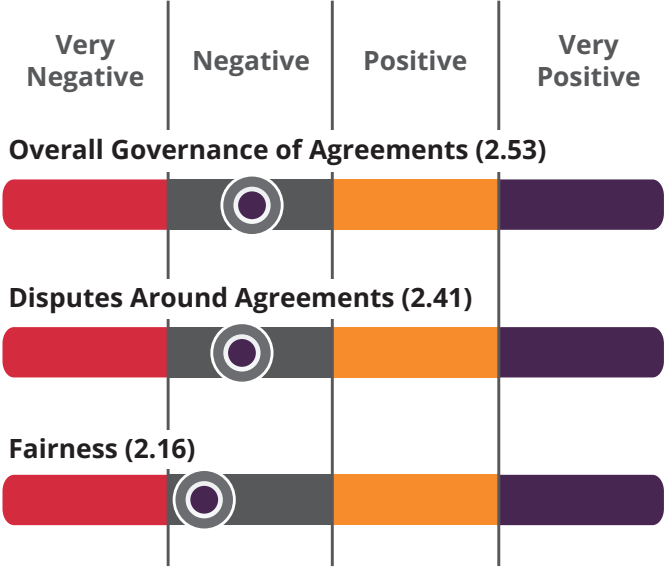


excluded. At times, such disputes can cause social disharmony and end up in village courts or lead to violence. While social disharmony and disputes are not good in any community, they can be especially destructive for communities in provincial PNG, where mining, oil and gas projects are typically situated. Although communities have their own dispute resolution processes and ways of keeping community harmony, this finding further illustrates the need to strengthen the governance and perceived fairness around agreements and implementation arrangements.

One of the main reasons that agreements are perceived to be negative could be a lack of access to information. Within the qualitative data, some people suggested that they did not really understand compensation and benefit arrangements and agreements, including what was in them, and/or the processes around them. This was the case even in well-established brownfield projects.

Overall, this finding suggests that there is much room for improvement around agreements as they are perceived to be not governed well, causing disputes, and lacking fairness.

While compensation and benefits arrangements and agreements are complex and multi-layered, there may be a need to review the effectiveness of agreement-making processes, to ensure that information is readily available, and to support landowners and impacted communities with capacity building to ensure they are better equipped to engage in the negotiation, implementation and monitoring of agreements.



Gulf Province - Rabia Camp Village - Woman sitting on her front verandah.

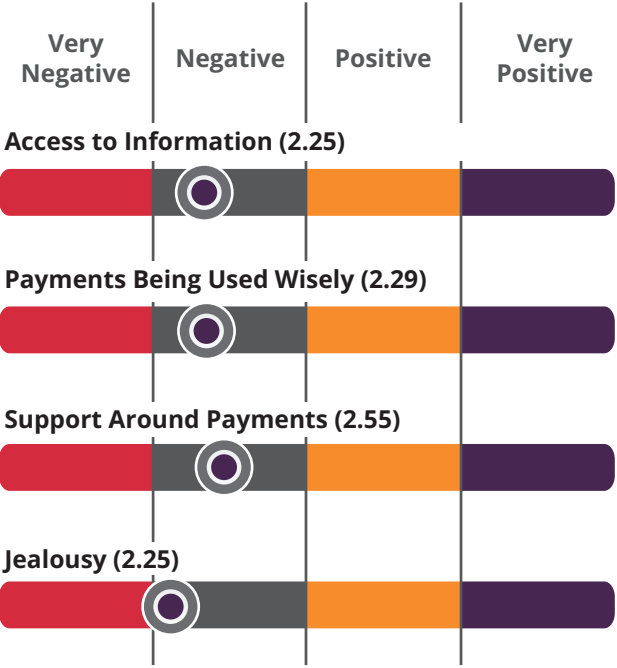
Royalty and Compensation Payments

Out of the 1827 people surveyed, 825 (45%) participants received royalty or compensation payments.

Overall, people were negative about the governance and use of royalty and compensation payments.

People receiving royalty or compensation payments reported that, in their opinion, there is not enough access to information (they are not easily able to find out where payments are going and how much). They also reported that payments are not spent wisely, and there is a lack of adequate support around payments, such as financial literacy training. Aligned to the finding on agreements and disputes, they also reported that royalty and compensation payments and arrangements cause jealousy in the community.

The 48 PWD who received payments were more negative than other groups. This may indicate that they felt more excluded from the process or do not benefit from the payments.



Transparency

People were asked to respond to the statement, ‘If I want to, I can easily access information about mining, oil and gas projects.’ The same was asked about landowner associations and the rules and regulations in the extractive sector. Participants were also asked to respond to whether ‘the governance of compensation and benefits of mining, oil and gas projects are impacted by corruption.’

Overall, perceptions of transparency were negative. People also reported that, in their opinion, the governance of compensation and benefits of mining, oil and gas projects was impacted by corruption.

This overall finding aligns to findings about agreements, where some people had a lack of knowledge and awareness about agreements and arrangements between mining, oil and gas projects and the community. A part of this lack of knowledge and awareness might be that people feel that they are not able to access information easily or do not know the correct channels to access information.

Participants in impacted communities of greenfield projects reported more access to information than other groups. This could mean that there is more access to information in the pre-production phase of the project lifecycle. Alternatively, it could be that people are likely to be more interested in a new project and how it will impact them and their community. Interest in the

project possibly wanes as it progresses, and efforts to share information may be reduced after agreements and arrangements are established. In other words, a person that has lived next to a mine for 20 years is less likely to ask questions about it than someone in a community where a new mine is being built.

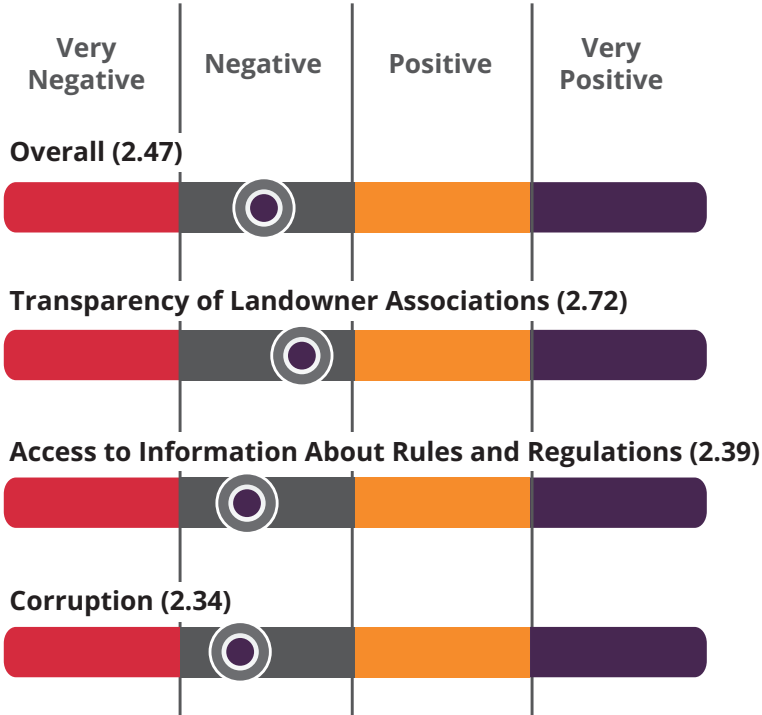
Men and women, youth and the elderly all reported low access to information. PWD reported particularly low access, again pointing to how some groups may be left out of the governance process.

Representatives from landowner companies (Lancos), as well as landowner association executives and employees reported more access to information than others. Again, this may be because these groups are more closely involved with the project than other community members and are more familiar with the communication channels. People who had a higher level of education were also more positive about transparency. Landowner association executives and employees are generally more educated, and a higher level of education gives access to and understanding of information around mining, oil and gas.

Stakeholders in mining, oil and gas must consider accessibility in their communication.

People’s perceptions around the governance of mining, oil and gas projects being impacted by corruption are troubling even as ethical behaviour and leadership is perceived to be an issue in other sectors in PNG, not just resource governance. This finding does point to an opportunity for stakeholders to continue to bolster anti-corruption and transparency efforts and initiatives at the sub-national level. This would help maintain people’s overall support and trust in the sector.

Perceptions on corruption align with findings on accountability that showed while people thought there were rules and regulations in place, enforcing these was an issue, and corruption was a factor in these not being enforced.



Overall, transparency is an area where there can be significant improvement that has long lasting impacts for both the sector and the wider population.

Relationships

Participants were asked to respond to the statement, 'Landowner association(s) have good relationships with its members and the community.' Similar questions were asked about extractive companies and the government.

Of the five governance areas measured, relationships were rated the most negatively.

Landowners (executives, employees and members) were more positive about relationships than other members of the community, though they were still negative.

There were no other meaningful differences between groups. People of different genders, PWD, CSOs, and impacted and non-impacted communities alike, all agreed that

relationships needed to be improved in resource governance.

This finding is of particular interest given the importance of relationships in PNG culture. Mining, oil and gas projects are places where relationships facilitate community access to resources, benefits and services.

Of the three areas, relationships between the government and other stakeholders were rated most negatively. This may be partly explained by an overall negative perception towards government, irrespective of the sector.

However, there are some other, more specific explanations that suggested themselves from the qualitative data.

For instance, some participants perceived the government as being a place where revenue for services went but then the services were not forthcoming. This denotes a bad starting point for a relationship around resource governance that is built on participation, accountability and transparency.

Some participants also reported that they felt left out of higher-level

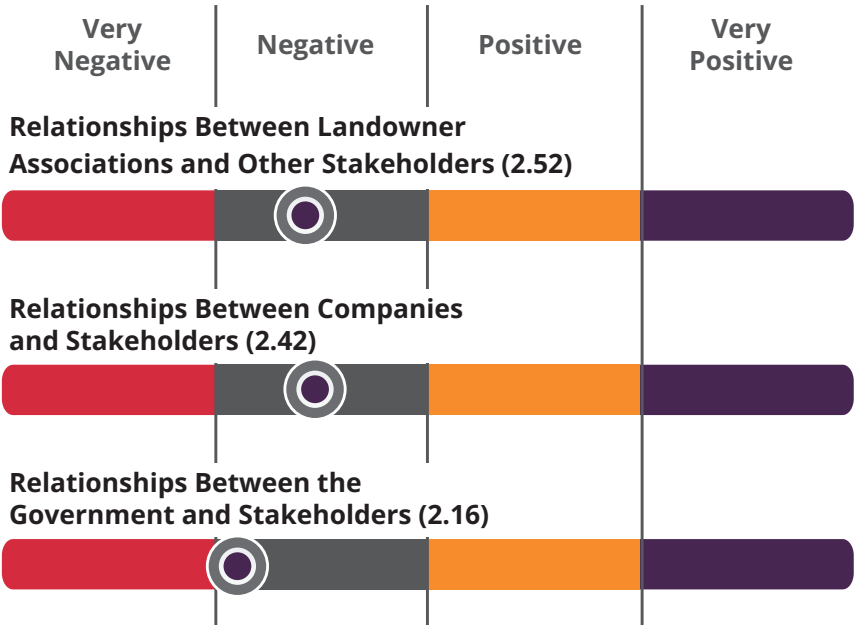
agreements between the government and developers and did not believe the government would do their best for landowners and the community.

Companies' relationships with other stakeholders were also rated negatively. This is unsurprising given the 'love/hate' relationship that communities can sometimes have with companies at different times in a project lifecycle. Companies can also be

seen as proxy governments in some locations and the negativity that flows from one (for instance about a lack of services) can be transferred to the other. For example, a community may be expecting road maintenance which is the responsibility of the government, though attribute the road to the mine and therefore hold the company accountable when it is not actually the responsibility of the company, and vice versa.

This negative rating on relationships also connects to the finding around participation, with some people thinking they can't contribute to discussions easily with mining, oil and gas companies. Communication is a key part of relationship building and is also an integral part of other areas of resource governance.

There may be some lessons in how landowner



Morobe Province - Wau Village - Interview with Wau Rural Local Level Government President.

associations interact with mining, oil and gas projects for how relationships might be improved. For example, landowner associations (members and executives and employees) rated their ability to participate more highly than other groups. Of course there is a very good reason for this, with landowners having a statutory right to negotiate compensation and benefits packages associated with extractive projects. Nonetheless, the finding does point to the observation that if other groups are effectively and appropriately involved in the resource governance process, it is likely to influence their experience of relationships as well.

This is also supported by the data, where if a mining, oil and gas project is more transparent, has better agreements, and is more participative, people in the community experienced the relationships with stakeholders more positively.³⁹

³⁹ This emerged through a correlation analysis, where relationships correlated with participation ($r = .33$, $p < .001$), agreements ($r = .50$, p

Governance and Impacts

Governance is a complex concept involving many different elements and intersecting areas⁴⁰. **Overall, it was found that strong governance improves perceptions of impact.** Four of the five areas of governance (participation, relationships, transparency and agreements) were related to overall impact perceptions (impacts on health, infrastructure, local economy, education, the environment).

Overall, it was found that strong governance improves perceptions of impact.

⁴⁰ A number of relationships were found between the governance areas and perceptions of impact. Some of these relationships are reported here, though this is a cross section of a larger set of analyses. These findings were chosen for their significance to the sector, their strength, and their importance according to stakeholder knowledge. For more information, an annex has been provided with details about the analyses and their results.



Morobe Province - Biaweng Village - Field Team members and community members.

This means that if a mining, oil and gas project was perceived as being participative, people were more likely to think it had a positive impact on their community. Similarly, if a mining, oil and gas project was seen to have strong relationships, it was more likely to be seen positively by the community, and so on for transparency and agreements.

Accountability was found to not predict positivity around impacts.⁴¹ It could be that participants perceived accountability not to be as directly related to mining, oil and gas projects at the local level as relationships, participation, transparency and agreements. Rather, accountability is more of a measure of rules and regulations at the sub-national and national level.

If this was true, then we would find that accountability would have no relationship with the other governance areas. This is exactly what we found and this also accords with the findings around accountability, which was the only area amongst participation, relationships, transparency and agreements to have a positive rating.⁴²

Statistical tests allow us to tell which of the governance areas has the most influence on perceptions of impact. On the following page is a diagram showing the influence of the different governance areas on impact perceptions. Of the five areas, **relationships** were found to have the largest influence on whether people in the community thought that mining, oil and gas had a positive impact.

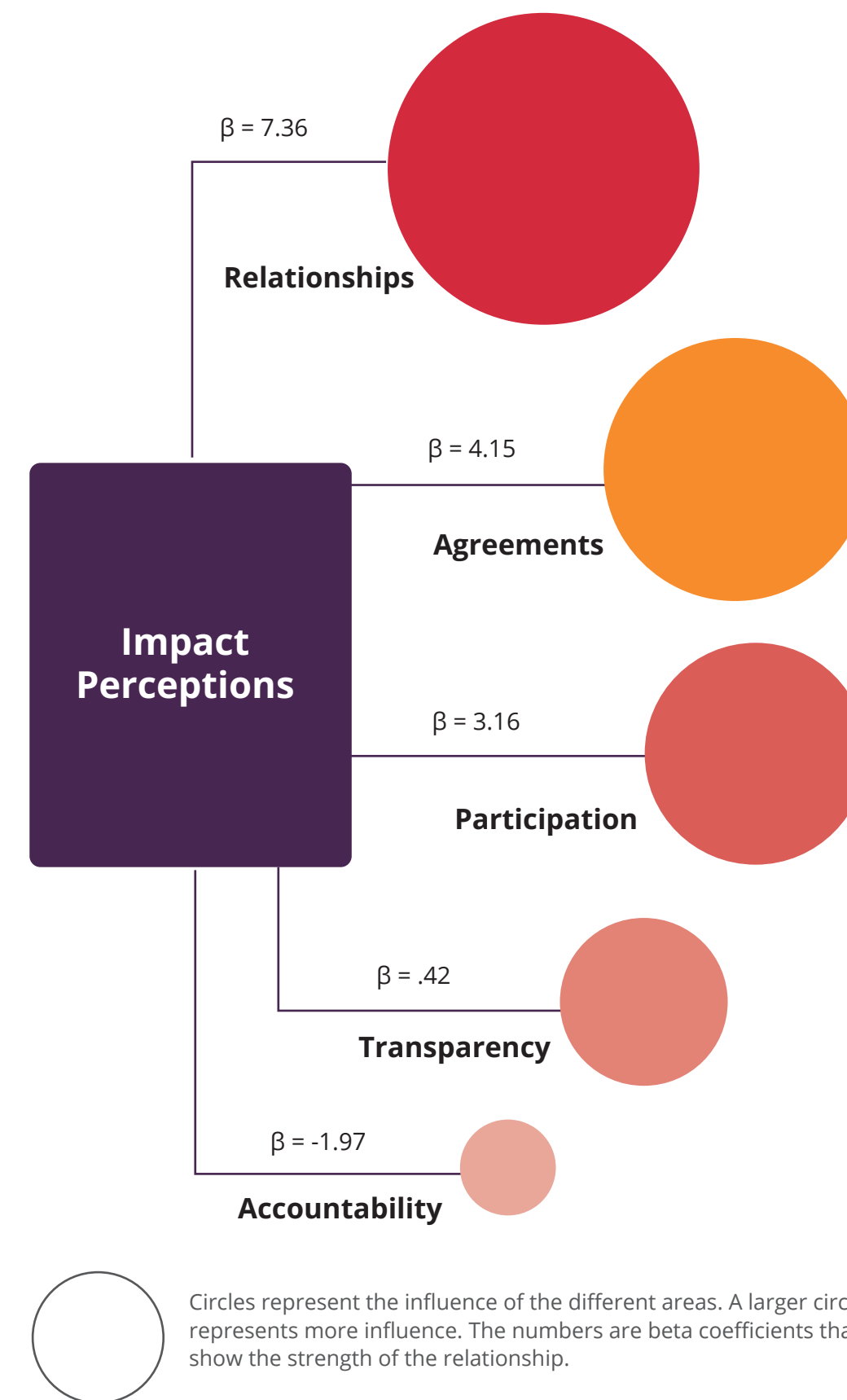
This makes sense given how throughout Melanesia culturally based mechanisms of reciprocity, kinship, relationality and securing livelihoods mean many aspects of life are defined by relationships.⁴³ In other words, people – especially those at the local level – frame resource governance and development impacts through relationships. An approach to resource governance that prioritises building and maintaining relationships at the community level would not only be more in line with how local communities perceive resource governance, but also how it can bring about greater development impacts.

41 A strong *negative* relationship between accountability and development impacts can be explained by people thinking there are enough rules and regulations, though despite this their communities have not received the benefits they were hoping for. 'There are a lot of rules and regulations in place, so why hasn't my community received more benefits?'

42 Correlation analysis revealed no correlation between accountability and general governance, participation, agreements or relationships. A very weak (.09) correlation was found between accountability and transparency, though this can tentatively be dismissed as a type I error resulting from the large sample size.

43 Strathern, M. 1998. *The Gender of the Gift: Problems with women and problems with society in Melanesia*. University of California Press.

Resource Governance and Impact Perceptions



Cultural governance improves how communities experience extractive projects.

Understanding resource governance in PNG cannot be done without connecting to local cultural principles and practices. A number of areas were measured as part of the Baseline to understand how culture interacts with resource governance and development impacts.



Governance Concept	Definition
Wok kastom	A broad concept that includes ceremonial activities and exchanges between individuals and groups. “Stakeholders’ level of participation in cultural ceremonies and activities is appropriate (i.e., wok kastom).”
Hanmak	Tangible evidence of giving and exchange. “Mining, oil and gas projects have visible and tangible impacts for landowners and communities (i.e., hanmak i stap).”
Pasin	The way in which a person or group conducts themselves. “Stakeholders of mining projects (companies, government, landowner association(s)), conduct themselves in a way that is considerate and culturally respectful (i.e., ol steikholda igat gutpela pasin).”
Luksave	Recognising the value and status of an individual or group, sometimes through an overt display. “Landowners and local communities get the respect and recognition they deserve (i.e., pappa graun na ol komuniti lain kisim gutpela luksave ikam).”
Wan bel	Reaching agreement or common understanding. “Stakeholders work together and collaborate (i.e., wan bel istap).”
Bihain taim	Considering the future. “Mining projects are run in a way that considers the future (i.e., bihain taim).”
Tok save	The giving, sharing or reporting of information or data. “Stakeholders communicate and engage well with landowners and local communities (i.e., tok save).”

Cultural Governance

Like resource governance, cultural governance is an incredibly complex concept. **Overall, it was found that there is room for improvement across all cultural concepts measured.**⁴⁴ Cultural governance was rated significantly more negatively than governance (accountability, participation, agreements, transparency, relationships). This may reflect the centrality of culture in PNG, the importance of these concepts to communities, and that these concepts do not come from ‘outside’. It also signals that there is room for improvement in how sector stakeholders operate in a way that is respectful of local culture.

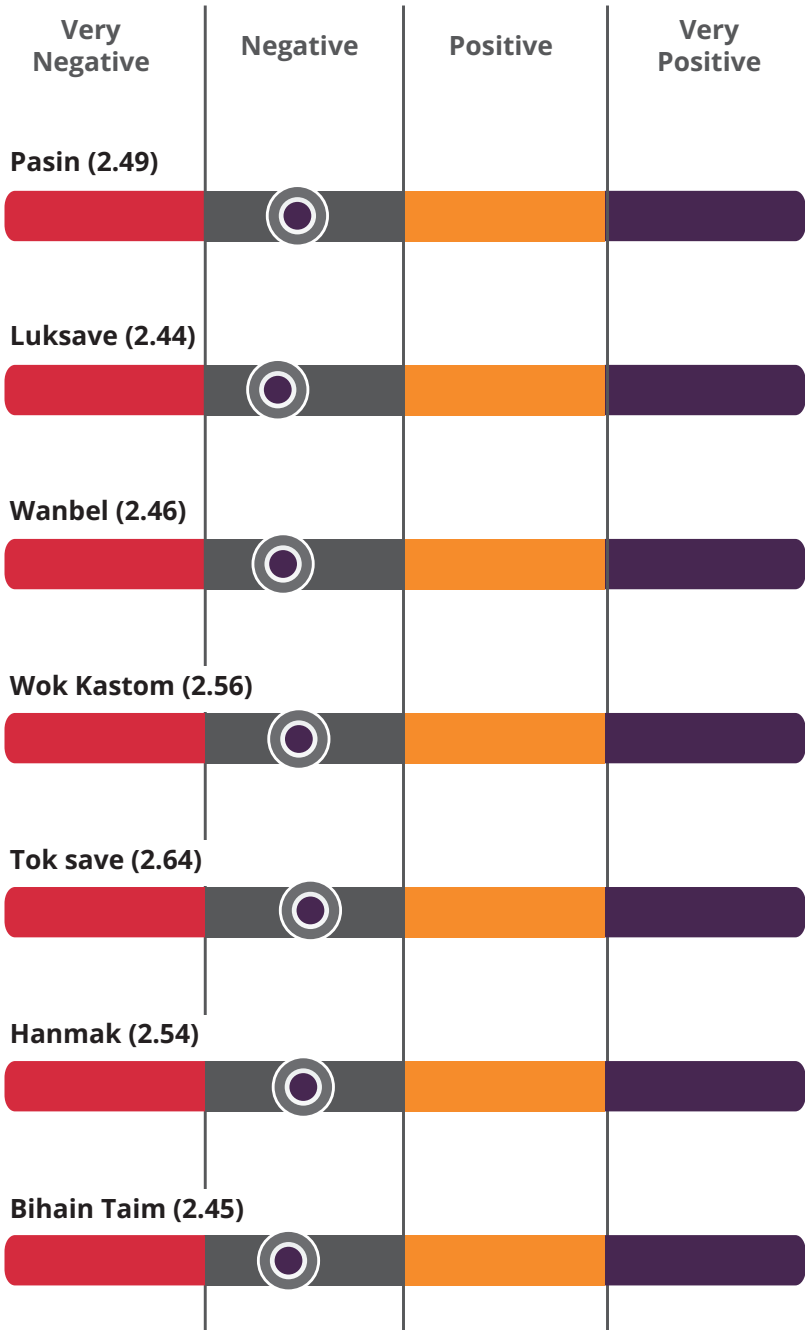
Although still rated negatively, the highest rated area was tok save. This comparatively high rating could be because there are some opportunities for stakeholders to

communicate around mining, oil and gas projects. However, tok save was still rated negatively, which aligns with findings around participation and transparency. Each of the cultural governance areas were highly correlated with each other. If a mining, oil and gas project had good pasin, it was also considered to have good luksave, wanbel, wok kastom and so on. This indicates that the areas of cultural governance that were assessed by the Baseline are highly interrelated, and that stakeholders in mining, oil and gas need to consider an approach that recognises the unique configuration of these areas in their local context.

People in impacted communities of brownfield mining, oil and gas projects rated cultural governance more highly than those who were not impacted by these projects. While the rating is still negative, it paints a potentially positive picture in that stakeholders are making an effort in these areas through discussions, programs and being aware of important cultural concepts and events. As such, there can be lessons learned on what is working and what is not, to build strength in this very important though underappreciated part of resource governance. Furthermore, non-impacted communities may not have had this experience of stakeholder efforts around

cultural governance taking place. As a result, they may surmise that stakeholders do not make much of an effort to respect local culture in their dealings around resource governance. Members, executives and employees of landowner associations also experienced cultural governance more positively than non-members, though their ratings were still negative. Similar to previous findings, this is likely due to the proximity that landowners have to resource projects, that they may have experienced efforts to respect local culture from stakeholders. Nonetheless, men and women, CSO members, government, and extractive company employees all agreed that there was room for improvement in cultural governance.

Overall, it was found that there is room for improvement across all cultural concepts measured.



44 As we have mentioned previously, it is acknowledged that culture is inherently complex and nuanced in PNG. The attempt to ‘measure’ concepts that are culturally relevant to how communities experience resource governance and development impacts therefore, necessarily, comes with the risk of generalising and quantifying cultural constructs in a way that is ‘reductionist’. Nonetheless, the attempt through the RGI to measure common cultural concepts through tok pisin terms represents an attempt to bring important local cultural concepts into the measurement of resource governance.

Cultural Governance and Impacts

The most important finding from analyses on governance and cultural governance is this:

Cultural governance has a strong influence on whether communities perceive the impact of mining, oil and gas positively—and leads to greater support for the extractives sector.

It was found that while governance influences how communities experience mining, oil and gas, cultural governance does the same with **almost twice the strength**. That is, for every step a stakeholder takes towards strengthening governance through agreements, transparency or participation, the same step taken to conduct themselves in a culturally inclusive and respectful way will have almost **twice the impact** on whether the community sees the impacts of the project positively or not.

For example, if a brownfield project is revisiting compensation and benefits agreements, they could release information about the project and the agreements (transparency), strengthen their relationship with other stakeholders (accountability) and conduct discussions surrounding the agreements with a diverse range of people (participation). Taking these steps would enhance people's perceptions on the impact of mining, oil and gas. However, this same process could also incorporate culturally framing how the project will impact the community into the future (bihain taim) and integrate important cultural aspects in discussions around the agreements (pasin, luksave, toksave). Taking these steps (as sector stakeholders sometimes do) would

produce an **even more positive** outcome rather than just taking steps to enhance transparency or participation.

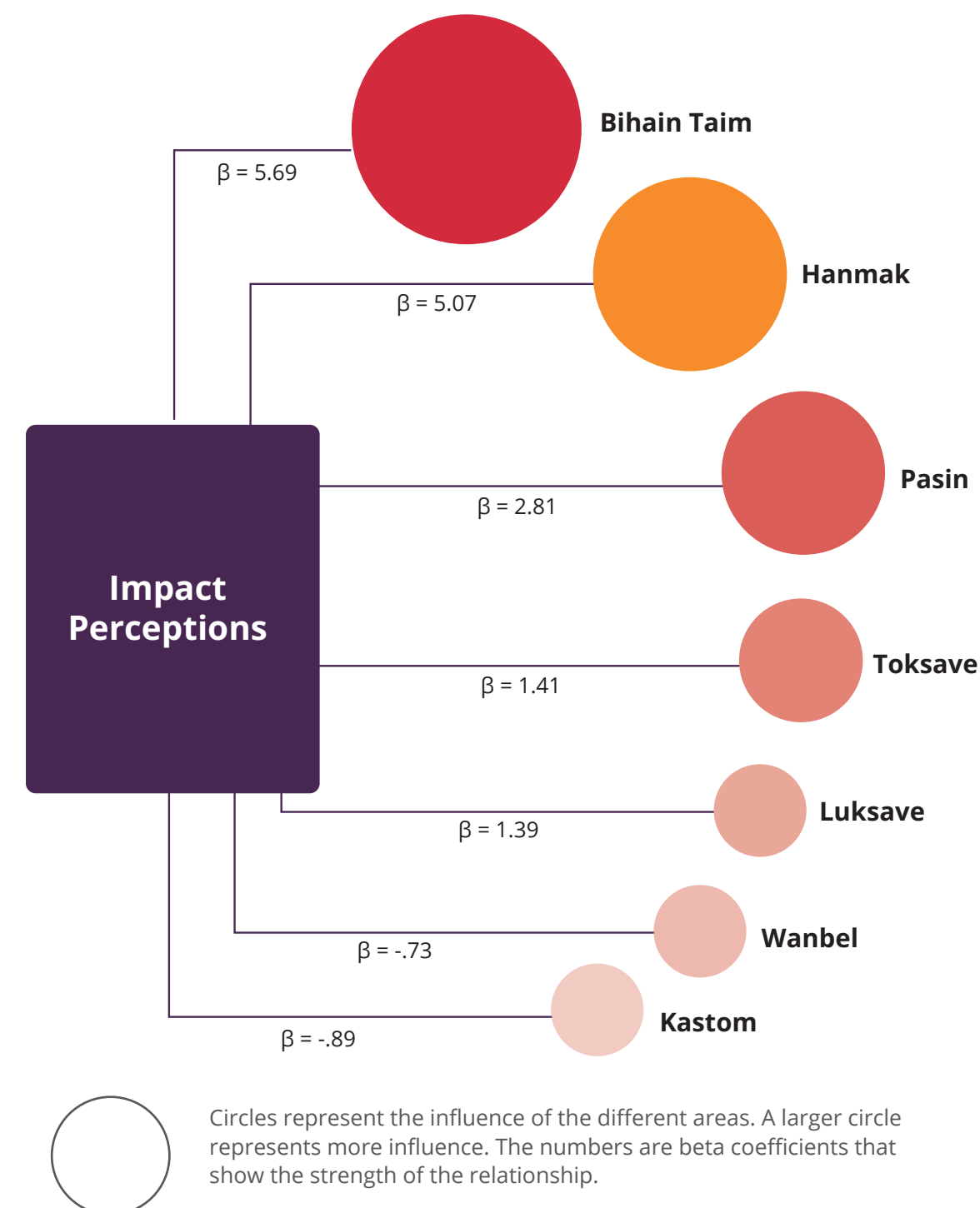
Bihain taim was the most important concept for influencing perceptions of impact. This could be due to people's perceptions and worries about project closure, which were found to be high. Hanmak was the next most important concept when it came to predicting perceptions of development impacts. There was an acute sense that mining, oil and gas had not delivered development in line with the expectations of the community and how those impacts are defined by the community.

Cultural governance also had a positive impact on support for the mining, oil and gas sector. Discussions, agreements and planning that is conducted in a culturally inclusive and respectful way means a mining, oil and gas project is more likely to be supported, though the effect is not as strong as it is for governance.

It is important to highlight that the governance and cultural governance concepts measured are not separate; they are highly related to one another. If a project has better governance (transparency, participation, agreements, relationships)

it is also likely to have better cultural governance. This means that an overall approach is called for; not one where cultural governance is 'tacked on' to 'good governance' measures, but where cultural governance and what it means to different local communities is included as part of resource governance efforts.

It is also important to acknowledge the work that stakeholders are already doing in working with communities with communities in a considerate and culturally respectful way. However, these findings illustrate the importance of cultural governance in the extractive sector and for strengthening resource governance overall.



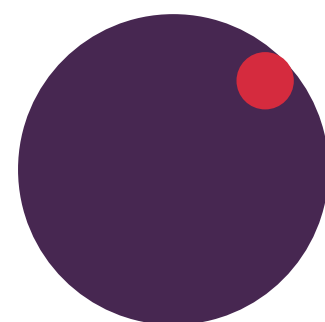
Organisation Reach

Participants were asked if they had heard of any of the following government departments and CSOs involved in resource governance in PNG. Overall, the reach of these organisations and government departments could be improved, with people in impacted areas having heard more of MRA and DPE than other national-level sector stakeholders.

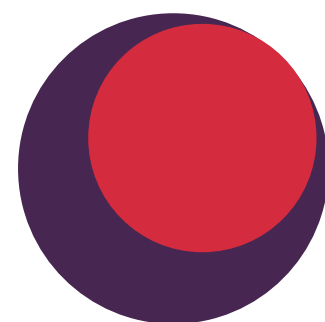
The findings indicate that PNGEITI and the peak civil society organisation PNGRGC have next to no reach or exposure sub-nationally or locally.

A stronger and more informed civil society can play a central role in resource governance to educate and build local capacity; to help assess sector policies and practices and help hold stakeholders to account.⁴⁵ This finding indicates a great need (and subsequent opportunity) to improve the reach of peak CSO bodies involved in resource governance.

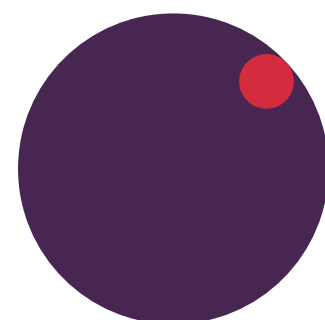
5%
had heard of PNGRGC



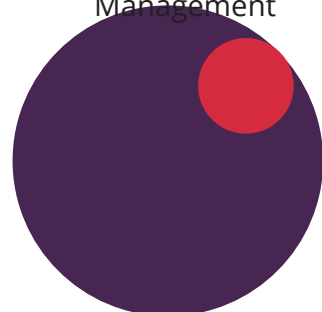
59%
had heard of MRA



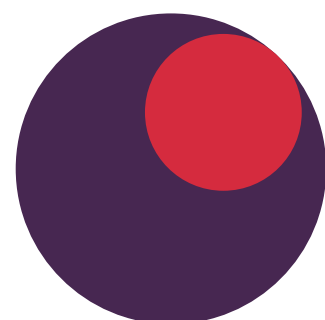
4%
had heard of PNGEITI



8%
had heard of Department of Mineral Policy and Geohazards Management



26%
had heard of Department of Petroleum and Energy



⁴⁵ Cameron, Peter D., and Michael C. Stanley. 2017. *Oil, Gas, and Mining: A Sourcebook for Understanding the Extractive Industries*. Washington, DC: World Bank.

Women and PWD have less opportunity to participate in resource governance.

In the locations surveyed, women reported that they had less opportunity to participate in discussions around mining, oil and gas than men did. The same was true of PWD when compared to the rest of the population. Both women and PWD also reported that when they did participate, they were not listened to as much as other groups were, denoting a lack of value placed on their opinions.

In impacted communities around extractive projects, women perceived that there were not enough opportunities for them to participate in discussions around mining, oil and gas. The same was true of PWD.

Importantly, both groups also reported that if they did participate, they were less likely to be listened to. Aside from feeling their opinions and knowledge were less valued, potential impacts of this could include benefits and services for women and PWD not being prioritised as they do not have a substantive voice in planning around mining oil and gas projects (e.g., infrastructure, community development initiatives and mine closure). This may reinforce wider social exclusions and deepen existing inequalities for women and PWD.

Women rated the impact of mining, oil and gas on wok bung more negatively than men did. The same was true of the impact on local culture, and the impact on them and their family, and their province. In each case, the more women participated, the more positive they were about the impacts of mining on these areas. This is a strong impetus for including women and other traditionally marginalised groups in the governance of resources.

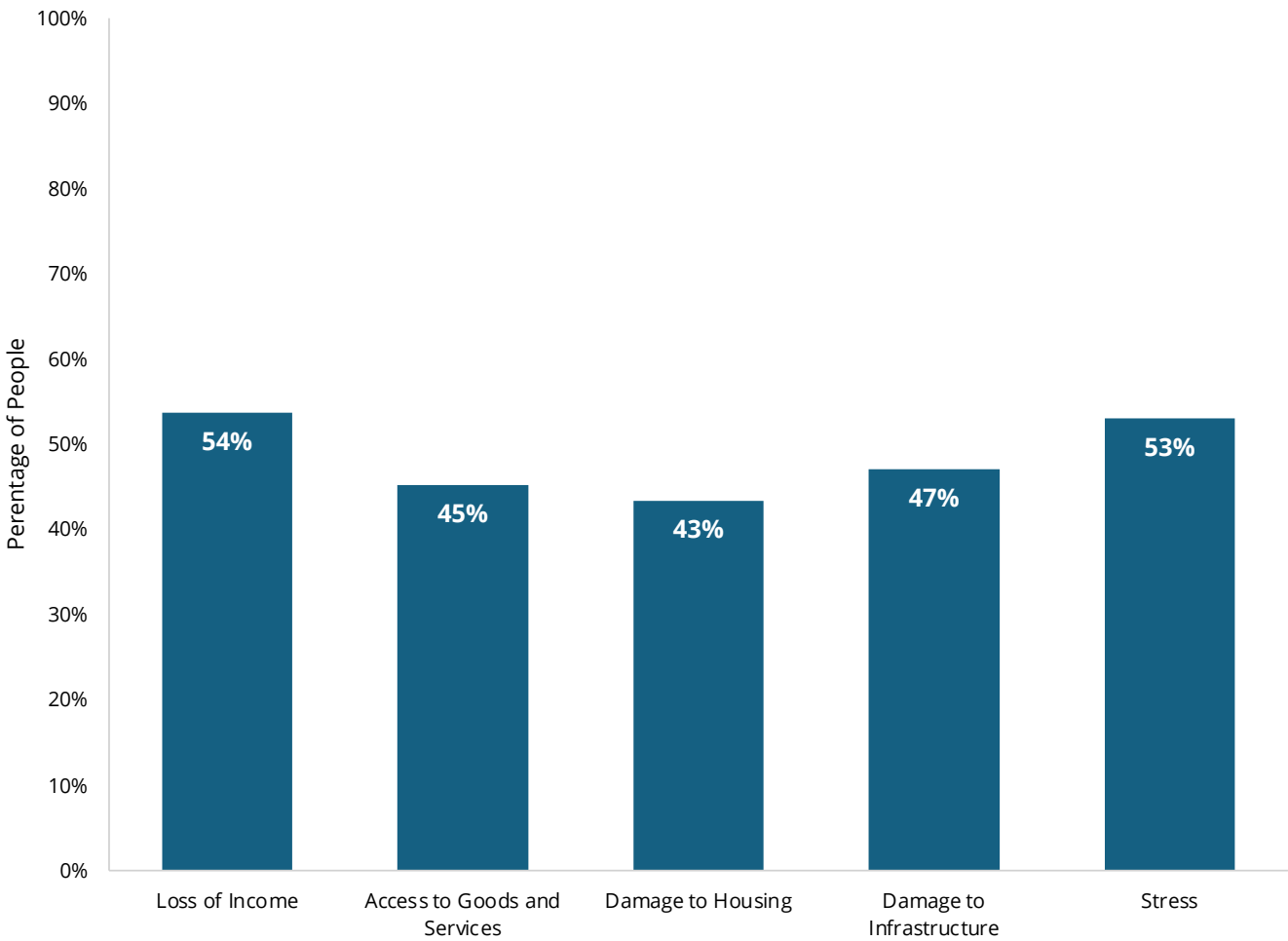
Acknowledging inclusion of PWD and women in PNG is a wider issue and not only limited to resource governance, however these findings illustrate there is still much improvement needed for women and PWD to contribute to discussions around mining, oil and gas in a meaningful way.

Climate Change

Participants were asked whether they had experienced a range of negative outcomes as a result of extreme weather events in the last five years.

It was found that more than half of participants had experienced a loss of income and/or stress resulting from extreme weather events, highlighting the risks associated with climate change and the importance of managing climate change risks in resource governance.

Impacts of Climate Change



Civil society and landowner capacity for resource governance requires strengthening.

The capacity of CSOs and landowner organisations (LOAs) to partake in resource governance is varied across different provinces and projects. Overall, many organisations assessed lack sufficient funding, capacity and resourcing to effectively participate in subnational resource governance efforts.



Gulf Province - Rabia Camp Village - Field Team Leaders doing a tok save with community members.

Many organisations are challenged by lack of organisational capacity to fulfil their mandate.

The Local Capacity Assessment tool, the Joint Organisational Capacity Assessment (JOCAT), was used to assess the organisational capacity needs and priorities of landowner associations and CSOs involved or impacted by resource governance. Landowner associations and CSOs play an important role in enabling greater participation of landowner and civil society groups in resource governance and economic development on their customary land and in their communities. These organisations also play an important role in the planning, delivery and monitoring of community development projects

linked to compensation and benefits packages. Despite the importance of these organisations in supporting good governance and just outcomes for those living in and around areas impacted by resource extraction, many organisations are challenged by lack of organisational capacity to fulfil their mandate. While not unique to the extractive sector or PNG, these capacity challenges ultimately constrain the development outcomes that are produced from mining, oil and gas projects.

Several key stakeholders have historically been involved in supporting landowner associations and civil society organisations in and around impacted

areas. These stakeholders include MRA, Mineral Resources Development Company Limited (MRDC), DPE, and the Investment Promotion Authority (IPA). Extractive companies have at times provided capacity development and administration grants to landowner organisations. Development partners such as the World Bank have tended to focus more on civil society efforts at the national level through their support for the PNGRGC.

The JOCAT was conducted with all available members of selected LOAs and CSOs to assess seven key areas: identity and purpose; governance, management and administration; financial management; services, programs and projects; networks and partnerships; and communications and information management.

Organisations Assessed

Morobe

- **Wagang Fall-out Landowner Association**
Assessed on 4 March 2023 with 10 participants
- **Butibam Landowner Association**
Assessed on 4 March 2023 with 5 participants
- **Nakuwi Landowner Association**
Assessed on 8 March 2023 with 7 participants

New Ireland

- **Niu Ailan Disability Persons Organisation (NADPO)**
Assessed in Kavieng on 5 March 2024 with 22 participants
- **Lihir Women’s Association (LWA)**
Assessed in Lihir on 4 March 2024 with 11 participants
- **Lihir Island Youth Association (LIYA)**
Assessed in Lihir on 12 March 2024 with 4 participants

Gulf

- **Kerema Urban Youth Association (KUYA)**
Assessed on 9 April 2024 with 2 participants
- **Kerema United Church Youth Group (KUCYG)**
Assessed in 9 April 2024 with 7 participants
- **Gulf Province Council of Women (GCW)**
Assessed on 10 April 2024 with 4 participants

Western

- **Western Province Disability Persons Organization (WPDPO)**
Assessed on 10 April 2024 with 10 participants
- **Ok Tedi Development Foundation (OTDF)**
Assessed on 11 April 2024 with 6 participants
- **CMCA Women and Children Associations (CMCA W&CA)**
Assessed on 12 April 2024 with 8 participants
- **Ok Tedi 6 Mine Village Women and Children Association (OT6MVW&CA)**
Assessed on 17 April 2024 with 9 participants

Lihir Island youth Association (LIYA)

Assessed in Lihir on 12 March 2024 with 4 participants

Partnerships and Stakeholder Engagement

The organisations assessed have varying levels of partnership maturity and stakeholder networks. Some organisations have strong relationships with select stakeholders, such as communities and extractive companies. However, there is potential to create stronger networks with government agencies and other sector stakeholders including nationally-based CSOs that work in the area of extractive governance, such as the PNGRGC, Transparency International PNG (TIPNG), the Institute for National Affairs (INA), and the Center for Environmental Law and Community Rights (CELCOR). Several organisations are in their infancy and as a result have not yet developed partnerships, so will likely require support to do so as they mature. Conversely, some organisations were more operationally mature with strong networks and partnerships.

Governance and Leadership

Effective leadership was found across organisations where governance is in place and executives were elected. Many organisations lacked effective and transparency governance structures, policies and procedures. Limited organisational maturity often constrained the strategic direction of organisations assessed, which has an impact on transparency of decision-making and reporting as well as standards of financial management. A small number of organisations are fully functional and operate with well-established leadership and governance structures.

Financial Management

Capacity in financial management is varied across the organisations assessed, partly due to the funding model for organisations varying greatly. Several organisations have standard financial management practices in place for budgeting, resource allocation and financial sustainability, however instances of financial mismanagement negatively impacted stakeholder confidence and weakened coordination and operations. In newly established organisations, financial management was constrained by a lack of financial systems and standard practices. In general, financial management practices such as record keeping and management of income streams are areas where more capacity is needed.

Program Management

Overall, organisations have some capacity in program management across design, implementation, and monitoring, evaluation and learning (MEL). However, there is an overall need for improved program and project management capability in line with organisation’s unique mandates, which range from representing landowner interests, to designing, implementing and monitoring community development programs, to advocacy and broader resource governance efforts. Organisations with mature program management practices typically receive technical support from extractive companies – either through administration grants or direct capacity building initiatives. Some organisations are newly established and have not yet operationalised projects and programs.

Human Resources

The organisations assessed have a range of human resource models, from volunteer models, to resource support from temporary seconded staff from government agencies, to funded full-time staff working in a management or projects capacity. Most organisations indicated they lacked sufficient human resources to fulfill their mandates, especially in newly formed organisations, but also in established organisations receiving funding support. While some standard practices are in place for some organisations, including elections and staffing processes, attracting suitable talent and developing human resource policies, developing staff capacity, filling skills gaps and maintaining a strong organisational culture have been identified as key challenges.

Organisational Resilience and Sustainability

Several organisations assessed have some ability to adapt and respond to changes to their operating context, however most faced challenges operating sustainably and resiliently. Significant capacity development is required for local organisations to overcome financial, political and operating challenges to become organisationally resilient and sustainable. Key areas impacting resilience include unsustainable financial models and poor financial practices, limited and ineffective governance, underdeveloped partnering capability, and a lack of project closure planning. The newly formed organisations that are in their operational infancy would benefit from capacity support relating to long-term organisational resilience and sustainability.

3

Pathways Forward

New Ireland Province - Kavieng - Pier at sunset.

Supporting a multi-stakeholder approach to subnational resource governance

The relational nature of resource extraction in PNG connects land, landowners, communities and their public representatives in the resource development and governance process. Supporting a multi-stakeholder approach to subnational resource governance is critical to ensuring more sustainable and inclusive development outcomes for landowners and local communities.

While mechanisms for multi-stakeholder extractive governance exist to varying degrees of effectiveness across PNG, the findings of the Baseline point to key opportunities to strengthen resource governance at the subnational and local levels in the areas of capacity development and institutional strengthening, data and reporting, agreement-making and social inclusion efforts.

These opportunities represent potential pathways forward for APEP to support multi-stakeholder governance efforts in

PNG. It is also hoped that the findings and recommendations from the Baseline will support broader sector efforts to strengthen policy and practice for subnational resource governance. Key stakeholders include national, provincial and local-level government agencies, landowner associations, community development vehicles, extractive companies, local civil society groups, and multi-stakeholder governance and civil society bodies that can support subnational governance efforts.

It is important to note that subnational governance arrangements in PNG's extractive sector vary significantly from project-to-project. These arrangements are typically grounded in local history, social structures, political economies and project agreements. While each subnational and project-level governance arrangement is unique, there are also common challenges, lessons learned and possibilities to strengthen multi-stakeholder governance in PNG's extractive provinces.

1. Support subnational capacity for resource governance

There is no shortage of opportunities to support the capacity of stakeholders involved in the subnational governance of extractive projects in PNG. Indeed, the identification of subnational capacity gaps will come as no surprise to sector stakeholders.

Key opportunities exist to support landowner associations, civil society organisations, community development foundations and provincial and local-level governments to effectively deliver on their resource governance roles and mandates. The following capacity development and institutional strengthening opportunities could be taken up by APEP, potentially in partnership with industry, development partners and government:

A. Multi-stakeholder Resource Governance Training and Capacity Development

Tailored to the needs of local stakeholder organisations around extractive projects, a local resource governance training program could focus on the foundational resource governance and sustainable development topics relevant for subnational stakeholders in PNG. The program could be delivered in partnership with key government agencies and other sector stakeholders through a multi-stakeholder model. It should be highly practical and relevant to the resource governance and development challenges around each extractive project. Depending on local needs, topics could include modules such as:

1. Mining / Oil and Gas Legislation in PNG
2. PNGEITI fundamentals
3. Community Development Planning for Impacted Wards
4. Agreement-Making, Negotiation and Conflict Resolution
5. Leadership for Inclusive and Sustainable Development
6. Project Closure Planning for Extractive Projects
7. Community Development Project Lifecycle
8. Good Governance for Boards and Foundations

An action learning approach could be adopted where participants form multi-stakeholder groups that focus on addressing key resource governance and development challenges that have been nominated by their constituents. Participants would have the opportunity to share learnings between stakeholder organisations, and to strengthen institutional and personal relationships that support 'wok bung' in a different context to the sometimes-adversarial set of social relations that can emerge from resource extraction. This opportunity for learnings and relationship building would extend to national and provincial stakeholders who have a role in the regulation of the sector, who could be invited to lead key topic areas relevant to their mandates.



New Ireland Province - Lihir - Aerial photograph.

B. Institutional Strengthening for Landowner Associations and Civil Society Organisations

Working with sector stakeholders, a targeted local capacity program could support select local organisations to build the institutional capacity to fulfil their resource governance roles. Drawing on the initial capacity assessments conducted for the Baseline, the program could focus on select landowner organisations and local CSOs depending on local stakeholder advice and partnerships. Specific institutional strengthening may include activities such as a review of governance instruments and practices, developing a strategic plan, putting in place foundational communication materials and programs, and building partnerships into the networks of national and regional initiatives.

C. Support stakeholders to investigate the merits of a Landowner Association Capacity and/or Compliance Body

Landowner associations have a unique and vital role in PNG's extractive sector. Historical experiences as well as the capacity assessments conducted for the JOCAT show that many landowner associations struggle for basic governance, financial and administration capacity. This means that landowner associations are often unable to fulfil their important roles representing their landholding constituents, at times falling into legal, reputational or financial difficulties. Although various government agencies in the sector play an important role supporting and regulating landowner associations in different ways, the task is significant and LOAs struggle for sufficient capacity and guidance to effectively deliver their mandate while meeting legal and statutory requirements.

The formation of a dedicated Landowner Capacity and Compliance Advisory Body or Unit (potentially within an existing agency) to support LOAs to navigate their roles and compliance requirements is an opportunity worth exploring. Depending on the mandated functions of the body, it could strengthen the engagement between landowners and extractive sector stakeholders by supporting the application of guidelines, norms and requirements around LOA participation in resource governance. Operating at the subnational level, the body could support LOAs across three areas:

- **LOA Registration:** Supporting landowners in the registration and incorporation process. The Body could offer technical support to landowner associations in the identification and registration of members, ensuring that LOAs understand their rights and obligations in the legal requirements of this process, and supporting the streamlined application of the legislative requirements for registration.
- **LOA Operations/ Governance:** LOAs play a key role facilitating the inclusion of

customary groups in resource governance and in supporting economic development on customary land. A potential focus of the Advisory Body could be to bridge the gap between customary and statutory legal frameworks. The Body could also support LOA groups to navigate compliance requirements, including the registration of members, and to address the technical knowledge gap of LOAs in engaging with developers for prospective projects on customary land. The body could also support technical knowledge exchange and capacity to monitor compliance with benefit-sharing agreements, environmental regulations, and social obligations by project parties. This advisory support may also extend to internal functions like audits.

- **Advise LOAs in negotiations with developers and government stakeholders:** Another potential function of a landowner advisory body is to offer technical support and guidance on agreement-making and negotiations between LOAs, extractive companies, and relevant government agencies. In this sense, the body would be like the proposed Solomon Islands Minerals Advisory Centre.

Clearly, any first step in scoping the utility of a LOA advisory body would be to work closely with government agencies and other sector stakeholders to evaluate its merits. Moreover, the challenges experienced by landowners and LOAs are not isolated to the extractive sector. While, for the purposes of this report, the suggested pathway forward is to explore the merits of a compliance and capacity development body for LOAs in the extractive industries, such support has the potential to contribute to overall LOA capacity in navigating other issues impacting their land.

D. Consider embedded support for provincial and local-level governments

Although the Baseline did not assess the capacity support requirements of subnational government entities, stakeholder meetings with provincial and local level governments as well as other sector stakeholders point to clear capacity needs. As a partnership between the Governments of PNG and Australia, APEP is in a unique position as a development partner to work with national departments such as the Department of Provincial and Local Level Affairs, the Department of Finance, and sector regulators including MRA, DPE and CEPA to assess opportunities to support capacity development and institutional strengthening for resource governance at the provincial and local level. This assessment could potentially take place in partnership with the Australia PNG Subnational Program who are leading existing efforts to support subnational government capacity through the Australia Aid program.

2. Partner with the PNGEITI to strengthen subnational data and reporting

In 2019 the PNGEITI MSG endorsed a plan for the subnational implementation of the PNGEITI. The plan was developed through a scoping study funded by the Australian Government through the PNG Governance Facility with co-funding from Newcrest Mining Limited. At the time, there was strong support for PNGEITI subnational implementation from all stakeholders—including both national and subnational levels of government, as well as extractive companies, landowner associations and businesses, and CSOs. Stakeholders saw PNGEITI subnational reporting as an opportunity to improve transparency, accountability and development outcomes at the local level.

In 2024 the findings of the Baseline further support the need for more accessible information on subnational and project level payments, transfers and expenditure—and other data relevant to communities living in extractive provinces. PNGEITI has the potential to play an important role in improving transparency, accountability and participation for subnational resource governance, especially for communities who feel resource revenues are not resulting in service delivery and community development. Strengthening subnational data and reporting contributes to greater transparency, participation and accountability over financial flows and impacts. Improved data and reporting also supports evidence-based decision-making, informs policy and practice, and contributes

to making good governance ‘normative’ for all stakeholders involved in extractive projects. Subnational implementation would also help the PNGEITI in the implementation of the EITI Standard 2023.

Important aspects of PNGEITI subnational implementation are:

- Establishing a PNGEITI Technical Working Group (TWG) to oversee subnational implementation.
- Developing governance and operational structures to oversee subnational reporting within the PNGEITI Secretariat.
- In consultation with national government agencies, provincial governments and subnational stakeholders, assess the most appropriate structure for subnational governance of the PNGEITI, with potential options including Subnational MSGs within Provincial Coordinating and Monitoring Committees (PCMCs), PNGEITI Desks, or the use of existing committees and structures connected to extractive projects.
- Development of a framework for PNGEITI subnational reporting requirements, templates and processes that includes payments, obligations, social and environmental impacts, and the expenditure of extractive-derived funds.



Morobe Province - Winima Village - Enumerator and community members.

- Assessing technology options for the digitalisation of real-time subnational reporting.
- Implementing a staged implementation approach to PNGEITI subnational reporting through pilot provinces, with subnational reporting agencies including provincial and local-level government entities, landowner

- entities, CSOs and extractive sector companies.
- Ensure operational sustainability of PNGEITI subnational reporting through institutional capacity development and monitoring, evaluation and learning activities.

3. Partner with the PNGRGC to support its Operationalisation

The PNG Resource Governance Coalition was formed as the umbrella civil society organisation for PNG's extractive sector. Established in 2014, the PNGRGC has the dual purpose of coordinating civil society's participation in PNGEITI while playing a broader role as an umbrella organisation for CSOs with an interest in PNG's extractive sector.

Through its Roadmap 2021-23 endorsed by its Council, PNGRGC outlines a series of strategic priorities and operationalisation needs, including its strengthening management and administrative functions. Other priorities relevant to subnational governance include conducting a membership drive in extractive provinces and

supporting the subnational implementation of the PNGEITI.

In recent times, PNGRGC has not had access to an administrative grant or other forms of funding to support key projects. The 're-operationalisation' of PNGRGC would support civil society in their dialogues with government and industry, strengthen civil society's participation in the governance of the extractive sector including the PNGEITI, and create membership networks at the subnational level to share data and learnings to support local stakeholders.

4. Scope a PNG Resource Governance Hub

The Baseline findings have indicated a need to improve resource governance at all levels, including access to knowledge and data. Online resources on good governance in PNG's extractives sector can be difficult to find, and are often spread across several locations, including local and international government, industry, CSO, think tank and academic websites. This means that knowledge is not easily accessible to those who would benefit from it the most, including landowners, impacted communities and citizens. It also means that key stakeholders leading governance efforts from government, civil society and industry do not always

have access to lessons learned from the past to support more inclusive and sustainable development of PNG's extractive resources into the future.

A PNG Resource Governance Hub could provide a knowledge repository of materials that support good governance in the inclusive and sustainable development of PNG's extractive resources. The library could be a 'one-stop-shop' for policies, legislation, standards, good practice guides, industry white papers, academic articles and research theses. It could also store key project-related documents such as sustainability reports and publicly disclosed

agreements. Metadata would be used so that documents could be searched and filtered by type, topic area, project and more.

The Hub could also include other features, depending on where it sits – either owned by a PNG institution from government, industry, civil society or academia, or perhaps coming under a multi-stakeholder initiative such as the PNGEITI. If the Hub did support PNGEITI's digitisation efforts, it could potentially connect to current efforts to digitise the reporting of real-time data. Key design questions for the hub could include its utility, custodian, features, scope and sustainability.



New Ireland Province - Kavieng.

5. Partner with the sector to learn from past agreements and agreement-making processes

The findings of the Baseline point to both a dissatisfaction with current project agreements as well as a lack of information and understanding about the commitments they contain. People in resource provinces across PNG perceive agreements to be not governed well, causing disputes, and not fair.

The terms of the agreements for PNG's resources projects dictate the local, provincial and national benefits streams derived from resource projects. Much work has gone into individual agreements, however little shared knowledge across projects about "what a good agreement looks like" if the goal is creating inclusive and sustainable impacts for landowners, impacted communities and the people

of PNG. There is therefore much value in better understanding the lessons that can be learnt from existing resource project agreements in terms of what types of obligations, mechanisms and vehicles support sustainable and inclusive development impacts in the geographical footprint of resource projects and for PNG more broadly. With the ongoing nature of agreement reviews in PNG's resources sector, focusing on improving agreements has the potential to bring about policy and practice reforms for both greenfield and brownfield resource projects. Key partners for any review would include national government agencies, provincial and local level governments, the PNG Chamber of Mines and Petroleum (CORE) and its members, landowners and impacted



New Ireland Province - Lessel Village - Community member.

communities, and CSOs.

The steps and considerations for support local-level agreement-making capacity:

- Conduct a high-level review of agreement-making processes and existing guidelines. This may include analysis of existing agreements and obligations to understand common provisions and terms of agreements. Independent observers could also be supported to partake in the upcoming development forums and agreement reviews across PNG to support review and learning.
- Support comparative learning and identification of lessons learnt and case studies through engagement with all levels of stakeholders to develop good practice approaches for the agreement making process.
- Understand how cultural governance practices can inform agreement-making processes. This includes what constitutes good practice in agreement-making from a cultural governance perspective.
- Develop a good practice framework and guidelines for local-level agreement-making in the extractive sector. A good practice guide should cover lessons learnt and good practice approaches from government, industry and landowners and impacted communities. It is an opportunity to establish an important foundation for ongoing and future community dialogue, recognising that the agreement process of extractive projects is what produces the end-product agreement. A good practice framework could also support discussions on enhancing policy and legislation around agreements. Key questions could include:
 - When it comes to strengthening governance for sustainable and inclusive development outcomes, what does an effective agreement look like?
 - What types of obligations, mechanisms and vehicles best support sustainable and inclusive development impacts in the geographical footprint of resource projects and for PNG more broadly?
 - What does an effective agreement-making process look like? Who is involved, how are decisions made, and what capacity is required to support stakeholders who sit at the agreement-making table?

6. Broker development partnerships in extractive provinces

Resource sector provinces and communities have many different development challenges and opportunities in areas such as agriculture; micro, small and medium enterprise (SMSEs) development; water, hygiene, and sanitation (WASH); education; health; and infrastructure, to name a few. At the same time, existing funding streams and delivery mechanisms are already in place with varying degrees of effectiveness.

With its focus on inclusive and sustainable economic livelihoods, APEP could broker partnerships with community development foundations, subnational governments and

extractive companies to support existing efforts for 'collective impact' in select target projects. Potential partnerships could attempt to connect both 'supply side' and 'demand side' opportunities. For instance, what development partnership opportunities exist on the 'demand side' in resource provinces (such as existing ventures or plans that are already in place and would benefit from a partnership with APEP)? What development partnership opportunities exist on the 'supply side' across the APEP pillars (i.e., existing APEP initiatives or priorities that could benefit stakeholders in extractive provinces)?



Gulf Province - Rabia Camp Village - Team Leader conducting a survey with community members.

Local level engagement should include the views of women, persons with disabilities, youth and other groups that are sometimes excluded from decision-making.

7. Support gender equality, disability and social inclusion in extractive provinces

As the findings of the Baseline have indicated, different groups experience resource governance and development impacts differently. Key considerations and priorities for more inclusive multi-stakeholder participation in resource governance are:

- Stakeholders should ensure often marginalised groups like women, persons with disabilities and youth participate effectively in decision-making for resource governance.
- Key project documents such as environmental and social impact assessments, project agreements and impact reporting should be made available and accessible to all stakeholders.
- Local level engagement should include the views of women, persons with disabilities, youth and other groups that are sometimes excluded from decision-making. Engagement can be enhanced by ensuring meeting places are in accessible locations and any special provisions to ensure accessibility are reasonably met; that meetings are set at times that make it possible for women and PWD to attend; and that they are held in a way that encourages active participation by all involved so that all opinions are valued.
- Infrastructure built from extractive-derived funds should be accessible and inclusive.
- Organisational capacity for local CSOs in social inclusion should be supported, including training on GEDSI and organisational practices that encourage participation of women, PWD and other groups who may be excluded from resource governance. This can include developing fit-for-purpose GEDSI plans, setting GEDSI targets, and monitoring, evaluation and learning around GEDSI.

Annex A:

Baseline

Summary

Data

Impacts

These results supplement the finding, ‘The net impacts of extractive projects are experienced negatively.’

Impacts across the provinces

Note that these scores are numeric, where scores in the report have been converted to ‘strongly negative’ to ‘strongly positive’. These scores range from 0 to 200, where 200 is ‘strongly positive’, and 0 is ‘strongly negative’. A score below 100 is negative.

Province	Impact Perception	Rating
New Ireland		
Impacted	68.23	Negative
Non-impacted	58.92	Negative
Overall	61.85	Negative
Morobe		
Impacted	78.64	Negative
Non-impacted	67.16	Negative
Overall	72.57	Negative
Western		
Impacted	77.58	Negative
Non-impacted	71.43	Negative
Overall	74.70	Negative
Gulf		
Impacted	68.08	Negative
Non-impacted	58.06	Negative
Overall	63.02	Negative

These are means (averages) for the provinces. Pairwise comparisons (student’s t-tests) were run and it was found that Morobe and Western were both significantly more positive about impacts than Gulf and New Ireland (all p’s <.001). There was no difference between Morobe and Western, nor between Gulf and New Ireland. I.e., people Gulf were as negative as people in New Ireland, and people in Morobe were as positive as people in Western.

Impacts across groups

These are the raw figures for impacts between the groups in the Baseline.

Group	Impact Perception	Rating
Women	65.62	Negative
Men	68.37	Negative
Landowner Members	74.2	Negative
Landowner Executives and Employees	79.8	Negative
PWD	62.66	Negative
CSOs	64.09	Negative
Part of an Agreement	69.51	Negative
Impacted (Brownfield)	70.36	Negative
Impacted (Greenfield)	77.42	Negative
Non-Impacted	66.2	Negative
Local Government	71.3	Negative
Provincial Government	66.26	Negative
National Government	64.09	Negative
Mining, Oil and Gas Company Employees	72.04	Negative
Landowner Company Employees	73.81	Negative

All of the group comparisons that were significant or relevant to the findings were included in the main report.

Relationship Between the Impacts

The impacts were found to be largely related to one another. The following is a table

showing the correlation statistics (Pearson's r), and one showing the significance (p) values. A p value of less than .05 indicates that there is a relationship between the two factors. The numbers highlighted in red show the relationships that did not turn out.

	Im1Health	Im2Educ	Im3Econ	Im4Infra	Im5Enviro	Im6Wokbung	Im7Culture	Im8PNG	Im9Commu	Im10Prov	Im11Indiv
Im1Health	1.00	0.53	0.34	0.36	0.24	0.21	0.13	0.11	0.22	0.23	0.25
Im2Educ	0.53	1.00	0.47	0.42	0.29	0.28	0.17	0.08	0.23	0.32	0.28
Im3Econ	0.34	0.47	1.00	0.49	0.23	0.19	0.08	0.11	0.24	0.38	0.35
Im4Infra	0.36	0.42	0.49	1.00	0.26	0.18	0.08	0.11	0.22	0.39	0.35
Im5Enviro	0.24	0.29	0.23	0.26	1.00	0.31	0.28	0.08	0.09	0.08	0.09
Im6Wokbung	0.21	0.28	0.19	0.18	0.31	1.00	0.53	0.08	0.10	0.13	0.12
Im7Culture	0.13	0.17	0.08	0.08	0.28	0.53	1.00	0.04	0.06	0.03	0.05
Im8PNG	0.11	0.08	0.11	0.11	0.08	0.08	0.04	1.00	0.68	0.26	0.18
Im9Commu	0.22	0.23	0.24	0.22	0.09	0.10	0.06	0.68	1.00	0.40	0.33
Im10Prov	0.23	0.32	0.38	0.39	0.08	0.13	0.03	0.26	0.40	1.00	0.77
Im11Indiv	0.25	0.28	0.35	0.35	0.09	0.12	0.05	0.18	0.33	0.77	1.00
	Im1Health	Im2Educ	Im3Econ	Im4Infra	Im5Enviro	Im6Wokbung	Im7Culture	Im8PNG	Im9Commu	Im10Prov	Im11Indiv
Im1Health	1	0	0	0	0	0	0	0	0	0	0
Im2Educ	0	1	0	0	0	0	0	0.0011	0	0	0
Im3Econ	0	0	1	0	0	0	0.001	0	0	0	0
Im4Infra	0	0	0	1	0	0	0.0007	0	0	0	0
Im5Enviro	0	0	0	0	1	0	0	0.0009	0.0001	0.0005	0
Im6Wokbung	0	0	0	0	0	1	0	0.0004	0	0	0
Im7Culture	0	0	0.001	0.0007	0	0	1	0.1287	0.0133	0.1931	0.0324
Im8PNG	0	0.0011	0	0	0.0009	0.0004	0.1287	1	0	0	0
Im9Commu	0	0	0	0	0.0001	0	0.0133	0	1	0	0
Im10Prov	0	0	0	0	0.0005	0	0.1931	0	0	1	0
Im11Indiv	0	0	0	0	0	0	0.0324	0	0	0	1

Support

The following results supplement the finding, 'People are supportive of the extractive sector.' These support ratings are average ratings from across the provinces. As with impacts, ratings range from 0 to 200, 0 being not supportive at all, and 200 being extremely supportive.

Support Across the Provinces

These findings show differences between the provinces. Gulf was the most supportive province, and those impacted in Morobe were the most supportive impacted community.

Province	Support	Rating
New Ireland		
Impacted	89.47	Not Supportive
Non-impacted	90.89	Not Supportive
Overall	90.44	Not Supportive
Morobe		
Impacted	121.8	Supportive
Non-impacted	92.2	Not Supportive
Overall	106.2	Supportive
Western		
Impacted	107.4	Supportive
Non-impacted	99.43	Neutral
Overall	103.7	Supportive
Gulf		
Impacted	115.5	Supportive
Non-impacted	115.9	Supportive
Overall	115.7	Supportive

Support Across Groups

Group	Support	
Women	97.02	Not Supportive
Men	104.99	Supportive
Landowner Members	106.9	Supportive
Landowner Executives and Employees	111.4	Supportive
PWD	99.36	Neutral

CSOs	83.59	Not Supportive
Part of an Agreement	103.8	Supportive
Impacted (Brownfield)	101.97	Supportive
Impacted (Greenfield)	122.1	Supportive
Non-Impacted	101.2	Supportive
Local Government	102.1	Supportive
Provincial Government	73.69	Not Supportive
National Government	83.59	Not Supportive
Mining, Oil and Gas Company Employees	104.9	Supportive
Landowner Company Employees	99.93	Neutral

The following shows the relationships between support and the different impacts. A larger value indicates a stronger relationship. All significance (p) values were < .001.

Area of Impact	Correlation with Support
Im1Health	0.2
Im2Educ	0.16
Im3Econ	0.18
Im4Infra	0.18
Im5Enviro	0.11
Im6Wokbung	0.11
Im7Culture	0.08

Im8PNG	0.31
Im9Commu	0.32
Im10Prov	0.23
Im11Indiv	0.18
Support	1

Governance

This section relates to the finding, ‘Subnational resource governance is generally experienced negatively.’ Conclusions were drawn about how groups experience the different areas of governance. To make these conclusions, overall indexes were made for each of the governance areas. The process for creating these indexed is outlined below.

Governance Concepts

To create scales for the different governance areas, confirmatory factor analysis was conducted. For a question to be included in the cluster for a governance area, answers on

that question needed to correlate at a level of .4 with other questions in that cluster. The correlation matrices for each of the clusters are included below.

General Governance

Note here that responses to the statement, ‘there is an effective plan for closure of mining projects’ did not correlate with other aspects of governance to the level of .4, and so it was left out of the index. The same was true of worry about mine closure. These two statements were conceptually different to the other statements, so they would have been left out of the index in any case. Whether the mine is generally run well and whether governance has improved over time were correlated to a level of .51, meaning we could be fairly confident that they were tapping in to the same area; general governance. All p values are less than .001, except those highlighted in red which are < .05, and in yellow which are < .01.

	Gg1Overall	Gg2Time	Gg3ClosePlan	Gg4CloseWorry
Gg1Overall	1	0.51	0.34	-0.06
Gg2Time	0.51	1	0.34	-0.07
Gg3ClosePlan	0.34	0.34	1	-0.07
Gg4CloseWorry	-0.06	-0.07	-0.07	1

Accountability

The accountability statements were all strongly related to each other. This gave us confidence that we tapped in to an overall accountability measure.

	Ac1Comp	Ac2Lando	Ac3Gov	Ac4Commun
Ac1Comp	1	0.71	0.71	0.48
Ac2Lando	0.71	1	0.75	0.6
Ac3Gov	0.71	0.75	1	0.62
Ac4Commun	0.48	0.6	0.62	1

Participation

Each of the participation statements correlated with one another at the level of .4 except for the statement ‘when I am involved in discussions around mining, oil and gas, I feel like my opinions are listened to’, which correlated with opportunities to participate with the community to a level of .36. Given its correlation with other areas of participation, it was decided that this question would be included in the index despite this one correlation not reaching the cutoff.

	Pa1Gov	Pa2Commun	Pa3Lando	Pa4Comp	Pa5Include
Pa1Gov	1	0.41	0.51	0.57	0.47
Pa2Commun	0.41	1	0.6	0.45	0.36
Pa3Lando	0.51	0.6	1	0.58	0.43
Pa4Comp	0.57	0.45	0.58	1	0.6
Pa5Include	0.47	0.36	0.43	0.6	1

Agreements

Of the three statements about agreements, only the overall governance of agreements and the fairness of agreements were correlated with each other. The second statement, ‘There are a lot of disputes around agreements for mining projects’ was left out of the index.

	Ag1Overall	Ag2Dispute	Ag3Fair
Ag1Overall	1	-0.09	0.5
Ag2Dispute	-0.09	1	0.02
Ag3Fair	0.5	0.02	1

Transparency

Of the statements about transparency, only the statement, ‘In my opinion, the governance of compensation and benefits of mining projects are impacted by corruption’ did not correlate with the other statements. This statement was left out of the index.

	Tr1Overall	Tr2Lando	Tr3Gov	Tr4Corrupt
Tr1Overall	1	0.63	0.7	0.01
Tr2Lando	0.63	1	0.59	0.01
Tr3Gov	0.7	0.59	1	0.04
Tr4Corrupt	0.01	0.01	0.04	1

Relationships

Each of the statements about relationships correlated with the other statements. Relationships of the government and relationships of landowners only correlated to a level of .37, though similar to participation, this statement did correlate with the others and was left in the index.

	Re1Lando	Re2Comp	Re3Gov
Re1Lando	1	0.53	0.37
Re2Comp	0.53	1	0.54
Re3Gov	0.37	0.54	1

Governance Across Provinces

The provinces experienced governance differently. The different ratings of overall governance are shown below. These values are averages across the province. The highest possible rating is 5, and the lowest is 1. A value of 3 is considered neutral. Those impacted in Gulf Province were the most positive about resource governance. This could be because of their close involvement with the project as it develops, and may capture their hopes for what the project will bring to the province.

Province	Governance Perception	Rating
New Ireland		
Impacted	2.64	Negative

Non-impacted	2.7	Negative
Overall	2.64	Negative
Morobe		
Impacted	2.65	Negative
Non-impacted	2.76	Negative
Overall	2.71	Negative
Western		
Impacted	2.76	Negative
Non-impacted	2.62	Negative
Overall	2.69	Negative
Gulf		
Impacted	2.9	Negative
Non-impacted	2.83	Negative
Overall	2.86	Negative

Governance Across Groups

Different groups experienced governance differently. The most positive group was landowner executives and employees.

Group	Governance Perception	Rating
Women	2.68	Negative
Men	2.73	Negative
Landowner Members	2.74	Negative
Landowner Executives and Employees	2.96	Neutral
PWD	2.66	Negative

CSOs	2.62	Negative
Part of an Agreement	2.73	Negative
Impacted (Brownfield)	2.62	Negative
Impacted (Greenfield)	2.81	Negative
Non-Impacted	2.73	Negative
Local Government	2.8	Negative
National Government	2.62	Negative
Mining, Oil and Gas Company Employees	2.7	Negative
Landowner Company Employees	2.86	Negative

Governance and Impacts

Analyses were conducted to determine whether governance was related to how participants perceived the impacts of mining, oil and gas projects. First, these relationships were looked at through correlations. The correlation table shows that each of the areas was significantly correlated ($p < .001$) with overall perceptions of impact, except accountability. The codes below correspond to governance indexes, where Gg stands for ‘General Governance’, Ac for ‘Accountability’, Pa for ‘Participation’, Ag for ‘Agreements’, Tr for ‘Transparency’ and Re for ‘Relationships’.

	Im12Overall	Gg	Ac	Pa	Ag	Tr	Re
Im12Overall	1	0.34	-0.03	0.21	0.28	0.22	0.29
Gg	0.34	1	0.04	0.24	0.44	0.36	0.41

Ac	-0.03	0.04	1	0.2	0.05	0.09	0.01
Pa	0.21	0.24	0.2	1	0.43	0.51	0.33
Ag	0.28	0.44	0.05	0.43	1	0.49	0.5
Tr	0.22	0.36	0.09	0.51	0.49	1	0.49
Re	0.29	0.41	0.01	0.33	0.5	0.49	1

Correlations can be misleading, because they do not account for the relationships between the areas. For example, general governance is related to participation, so does strong general governance create participation, which then creates positive impacts? Or is it the other way around? Regression allows us to explore this. The results of the regression model are shown below. A larger beta coefficient indicates a stronger relationship (highlighted in pink). It was shown that relationships have the largest influence over perceptions of impact.

Coefficients:

	Estimate	Std.	Error	t	Pr(> t)
Re	7.36	1.00	7.39	0.00	***
Ac	-1.97	0.67	-2.96	0.00	**
Pa	3.16	0.90	3.50	0.00	***
Ag	4.15	0.88	4.74	0.00	***
Tr	0.42	0.91	0.46	0.65	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Cultural Governance

This section relates to the finding, 'Cultural governance improves how communities experience extractive projects.' First, the different cultural governance concepts were rated differently by participants.

Ratings Across Concepts

Luksave was rated the most negatively out of the cultural governance concepts. The highest rated was Tok Save.

Concept	Score	Rating
Pasin	2.49	Negative
Luksave	2.44	Negative
Wanbel	2.46	Negative
Kastom	2.56	Negative
Tok Save	2.64	Negative
Hanmak	2.54	Negative
Bihain Taim	2.45	Negative

Ratings Across Groups

Groups rated the cultural governance of mining, oil and gas projects differently. The group that was most positive was landowner executives and employees

Group	Governance Perception	Rating
Women	2.52	Negative
Men	2.51	Negative
Landowner Members	2.65	Negative
Landowner Executives and Employees	2.93	Negative
PWD	2.55	Negative
CSOs	2.52	Negative

Part of an Agreement	2.68	Negative
Impacted (Brownfield)	2.62	Negative
Impacted (Greenfield)	2.72	Negative
Non-Impacted	2.48	Negative
Local Government	2.59	Negative
National Government	2.52	Negative
Mining, Oil and Gas Company Employees	2.71	Negative
Landowner Company Employees	2.63	Negative

To find out more about the
Baseline, go to the PNG
Resource Governance Hub





PNGAus Partnership



SquareCircle
INSIGHT FOR DEVELOPMENT